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ILLINOIS POLLUTION CONTROL BOARD

PEOPLE OF THE STATE OF	
ILLINOIS,) MAY 3 1 2013
Complainant,) STATE OF ILLINOIS Pollution Control Board
VS.) No. PCB 04-16
PACKAGING PERSONIFIED,) (Enforcement-Air)
INC., an Illinois)
Corporation,)
Respondent.)

TRANSCRIPT FROM THE PROCEEDINGS taken before HEARING OFFICER BRADLEY P. HALLORAN by KARI WIEDENHAUPT, CSR, at the City of Elmhurst, 209 North York Street, Council Room, 2nd Floor, Elmhurst, Illinois, on the 21st day of May 2013, A.D., at 9:00 o'clock a.m.

ILLINOIS POLLUTION CONTROL BOARD, 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601 MR. BRADLEY P. HALLORAN, HEARING OFFICER

Page 2 1 APPEARANCES 2 OFFICE OF THE ATTORNEY STATE OF ILLINOIS 69 West Washington Street 3 Suite 2800 4 Chicago, Illinois 60602 (312) 814-3000 5 BY: MR. CHRISTOPHER GRANT MS. NICHOLE SANGHA 6 Appeared on behalf of the Complainant; 7 DRINKER, BIDDLE & REATH, L.L.P. 9 191 North Wacker Drive 8 Suite 3700 9 Chicago, Illinois 60606 (312) 569-1000 10 BY: MR. ROY M. HARSCH 11 Appeared on behalf of the Respondent. 12 13 14 15 16 17 18 19 20 21 22 23 24

Page 3 1 INDEX 2 Re Re By 3 WITNESSES: Direct Cross Direct Cross Examiner 4 JOSEPH IMBURGIA 15 50 102 133 5 89 136 141 6 RICHARD TRZUPEK 143 176 232 249 7 CHRISTOPHER McCLURE 8 252 264 280 284 9 KEVIN MATTISON 287 307 317 10 RICHARD TRZUPEK 11 319 330 333 334 12 EXHIBITS MARKED FOR ID ADMITTED 13 NUMBER 14 HEARING OFFICER Exhibit No. 2 12 12 15 COMPLAINANT Exhibit 16 No. 15 316 No. 16 88 No. 18 17 230 No. 19 146 18 No. 21 62 No. 22 287 19 RESPONDENT Exhibit 20 No. 59 22 No. 60 24 21 No. 61 286 No. 62 146 22 No. 63 (offer of proof) 132 Nos. 64-65 257 23 No. 66 286 24

Page 4 1 2 HEARING OFFICER HALLORAN: Good 3 morning, everyone. My name is Bradley Halloran. 4 I am a hearing officer with the Illinois Pollution 5 Control Board. I am also assigned to this matter 6 entitled, People of the State of Illinois, the 7 Complainant, versus Packaging Personified, Inc., PCB 2004-16. Today is May 21st, 2013. 8 It's 9 approximately 9:25 a.m. 10 This supplemental hearing was 11 scheduled in accordance with the Illinois 12 Environmental Protection Act and the Pollution 13 Control Board rules and procedures. It will be 14 conducted according to the procedural rules found 15 in Sections 101 and 103 of the Board's procedural 16 rules. This is an air enforcement case, and as 17 most of you know, I do not make the ultimate 18 I am here to rule on any evidentiary decision. 19 matters and make the record hopefully clear and 20 concise so that the five members of the Board can 21 peruse and rule. 22 On March 1st, 2012, the Board 23 granted respondent's motion for reconsideration in 24 The majority of the Board directed the part.

1 / Page 5 parties to expeditiously return to hearing solely 1 2 to address a discreet economic benefit matter 3 concerning penalty. The Board requested the 4 parties to address the following: 5 Did the press 5 tunnel dryer 6 system constitute a capture system and control 7 device under 35 Illinois Administrative Code 8 218.401(c)? 9 Would press 5 and the tunnel 10 dryer system have accommodated the entire 11 production of both press 4 and press 5 from March 12 15th, 1995 to February 26th, 2004? What costs, if 13 any, did Packaging avoid or delay by not shifting 14 press 4's production to press 5 until after press 15 4 ceased operating in December of 2002? 16 Would a formal stack test of the 17 press 5 tunnel dryer system have demonstrated 18 compliance with the capture and control 19 requirements of 35 Illinois Administrative Code 20 218.401(c)? 21 What costs, if any, did 22 Packaging avoid or delay by not building a TTE for 23 press 5 and performing a formal stack test of the 24 tunnel dryer system?

Page 6 1 Before we proceed to opening, if 2 any, if the parties could introduce themselves and then we will take care of any preliminary matters 3 4 that we have to. State? 5 MS. SANGHA: Nichole Sangha with the 6 People. 7 MR. GRANT: Chris Grant with the 8 Attorney General's Office. 9 MR. HARSCH: Roy Harsch with the law 10 firm of Drinker, Biddle and Reath on behalf of 11 Packaging. 12 HEARING OFFICER HALLORAN: Thank 13 Do you want to tackle any preliminary vou. 14hearing matters we have now regarding the motions 15 in limine or the motions for non-disclosable 16 material now, or do you just want to do that when 17 they come up? 18 MR. GRANT: Sure. The State is 19 ready. 20 HEARING OFFICER HALLORAN: Opening, 21 State? 22 MR. GRANT: We are going to waive 23 opening statements. 24 HEARING OFFICER HALLORAN:

Page 7 1 Mr. Harsch, opening? 2 MR. HARSCH: Very briefly. We are 3 thankful that the Board did grant our motion for 4 reconsideration in part, and we believe that we 5 will be showing today through the testimony of Joe 6 Imburgia, Richard Trzupek and Christopher 7 McClure --8 THE COURT REPORTER: I'm sorry. Τ 9 can't hear you. 10 MR. HARSCH: Through the testimony 11 of Joe Imburgia, Rich Trzupek and Christopher McClure we will be able to successfully respond to 12 13 all of the questions the Board directed the parties to hearing for today, and that will 14 15 conclude my opening statement. 16 HEARING OFFICER HALLORAN: Do you think it might be wiser to move the table closer? 17 18 It's going to be a long hearing. 19 THE COURT REPORTER: Yeah. It's 20 pretty hard for me to hear. 21 HEARING OFFICER HALLORAN: Yeah, so 22 I think we are going to have to --23 MR. HARSCH: I can speak up a little 24 louder.

/ / Page 8 1 HEARING OFFICER HALLORAN: A11 2 right. I neglected to mention by agreement 3 because this is a supplemental hearing, and it's 4 pretty much addressed in the 42(h) factors that 5 Packaging will proceed first. So if Packaging 6 wishes to call their first witness. 7 MR. HARSCH: Yes. Mr. Joe Imburgia, 8 please, take the stand. 9 HEARING OFFICER HALLORAN: 10 Mr. Harsch, will you be getting into the 11 non-disclosable stuff? 12 Well, first let me MR. GRANT: Yes. 13 Is Mr. Dominic Imburgia going ask -- excuse me. 14 to testify? 15 MR. HARSCH: Not -- I don't intend 16 to. 17 MR. GRANT: Yeah, we will be getting 18 into the non-disclosable stuff. 19 HEARING OFFICER HALLORAN: A11 20 right. Should I close the door and post a sign 21 regarding the hearing is closed until Mr. Imburgia gets off the stand? Would this be a good time to 22 23 do it or how far into direct? 24 MR. HARSCH: I believe it will be

Page 9 1 very limited, if at all, in my direct. 2 HEARING OFFICER HALLORAN: Okay. All right. Well, proceed, but as soon as you 3 4 start touching on it, I will shut the door. 5 (Whereupon, a discussion was had 6 off the record.) 7 HEARING OFFICER HALLORAN: What I 8 have suggested to the court reporter is when we 9 start talking about the non-disclosable 10 information that she get a different transcript 11 and do it that way and let me know when it's 12 finished. Mr. Harsch? 13 MR. HARSCH: Yes. I should have --14 you know, I didn't understand basically what you 15 We have -- Packaging has filed a -were asking. 16 Packaging has reached a stipulation with 17 Mr. Grant, with the State, with respect to how to 18 address and how to handle certain confidential 19 information that was taken from tax returns that 20 were provided to the State in response to a 21 discovery request in the Board order. 22 We agreed to do so in this 23 manner so that we would not have to produce the 24 actual tax returns and have them treated as trade

Page 10 I have filed a motion with the hearing --1 secret. 2 with the Board and the Hearing Officer to treat 3 this information as confidential and mark it as 4 such. 5 Mr. Grant and I have reached --6 signed a stipulation to that effect. We have 7 both -- we marked the documents as 8 confidential/non-disclosure, and we have redacted 9 copies available as well that have the numbers 10 removed from the stipulation. 11 To the extent necessary, if it comes up, I do have the income tax returns for the 12 13 years in question with me, and I have made copies 14 of the first two pages of the return with the line 15 items also redacted, if that were to come up. 16 And at the Hearing Officer's 17 suggestion, we have also presented a motion --18 excuse me -- an affidavit from Mr. Dominic 19 Imburgia regarding the fact that Packaging always 20 treats their tax information as confidential, and 21 only discloses it with that understanding, and 22 that they would suffer harm potentially because of 23 their competitors or their customers using the 24 information contained in the returns.

Page 11 1 And I believe I provided you 2 with a copy and will provide a substitute copy 3 that is actually notarized. I just got the signed 4 affidavit this morning. 5 HEARING OFFICER HALLORAN: 6 Mr. Grant, did you drop that stipulation up here? 7 I can't find it. Did you put it in the book? Ι 8 thought it was --9 MR. GRANT: Oh, yes. It's Exhibit 10 No. 17. That's a version that's signed. 11 MR. HARSCH: Is that -- does that 12 include the redacted version as well with a --13 MR. GRANT: No. It's not. It's just the stipulated with -- from the 1994 to 2004 14 15 income tax information. We stipulated gross 16 profit. We've stipulated total income and sales. 17 MR. HARSCH: We will need then to 18 provide, and we will do so, the redacted version 19 that just has those numbers removed from it as 20 well. So that would be a non --21 MR. GRANT: Oh, so that we have an 22 exhibit with the material redacted? Yeah. I have 23 not -- I didn't prepare that. So if we have got 24 one that has those, we could do that at the end,

Page 12 1 if you want. 2 HEARING OFFICER HALLORAN: So you are going to submit a redacted stipulation of 3 4 facts without the numbers? 5 MR. HARSCH: Yes. 6 HEARING OFFICER HALLORAN: Okay. 7 All right. And I see it is marked trade 8 secret/non-disclosable information across the 9 front. 10 I am going to grant that motion 11 subject to the Board's final approval, and also Mr. Harsch did indeed give me an affidavit that I 12 13 requested to supplement his May 6th filing of a 14 motion to mark the trade secret and 15 non-disclosable information. 16 So I will grant that, and I am 17 going to mark it as Hearing Officer Exhibit 2, and 18 as soon as, I guess, Mr. Harsch gets back to the 19 office and hopefully sometime this week, he will 20 send it along to the Board. 21 (Whereupon, HEARING OFFICER 22 Exhibit No. 2 was marked for 23 identification and admitted 24 into evidence.)

1 MR. GRANT: I wonder if I could 2 respond to something Mr. Harsch said. Just for 3 the record, we are going to object to either the 4 production of or use of the written tax materials. 5 They were withheld from us for about nine months. 6 It took two motions to compel. We finally worked 7 out an agreement where I did not get copies of 8 them, but where I was able to go to Mr. Harsch's 9 office and take a look at them. 10 And we did so. I pulled out

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11 information that I didn't think was prejudicial or 12 personal for these people, and that's what we 13 created a stipulation from. As far as using other 14 information in the documents -- actually using the 15 document, I have no problem with him preparing his 16 witness with them prior to hearing, but as far as using them in hearing or trying to enter them into 17 18 evidence for any purpose, we are going to very 19 strongly object to that.

HEARING OFFICER HALLORAN: Okay. I don't have anything in front of me yet, nor have I heard Mr. Harsch mention anything, so -- yeah, regarding the tax returns. All I heard was we are going to use these numbers regarding the

Page 14 stipulation with the numbers in there. 1 2 I know we had a conference call 3 the other day, and it was mentioned, but so far 4 today I haven't been privy to anything. 5 MR. GRANT: Sure. Just to let you 6 know our position, I had one other request -- and if Mr. Harsch would agree to this. Ordinarily one 7 8 attorney handles all the examination for one 9 witness. I was planning on putting the tax 10 information in with Mr. Dominic Imburgia. If he 11 is not going to testify, I would like to be able 12 to handle that part of the examination with the 13 witness that's on the stand, if there is no 14 objection to that. 15 MR. HARSCH: I don't have any 16 objection. 17 Thank you. I appreciate MR. GRANT: 18 it. 19 HEARING OFFICER HALLORAN: So, 20 Mr. Harsch, anything further on any kind of 21 preliminary matters? 22 MR. HARSCH: I don't believe so. 23 HEARING OFFICER HALLORAN: Okay. 24 Great. Just let me know when you get into the

Page 15 non-disclosable stuff, and we will seal the room. 1 2 You may proceed. 3 BY MR. HARSCH: 4 Mr. Imburgia, would you please state Ο. 5 your full name for the record? 6 HEARING OFFICER HALLORAN: Can the 7 court reporter please swear Mr. Imburgia in, 8 please? 9 (Whereupon, the witness was duly 10 sworn.) 11 JOSEPH IMBURGIA, 12 having been first duly sworn, was examined and 13 testified as follows: 14 DIRECT EXAMINATION 15 BY MR. HARSCH: 16 Q. Okay. Mr. Imburgia, please state 17 your full name for the record. 18 Α. Joseph Dominic Imburgia. 19 THE COURT REPORTER: Can you spell 20 that, please, the last name? 21 THE WITNESS: I-M-B-U-R-G-I-A. 22 BY MR. HARSCH: 23 0. And you've testified in previous 24 hearings?

Page 16 1 Α. Yes, I have. 2 Q. What is your current position in 3 Packaging? 4 General manager of operations. Α. 5 Q. And what is entailed, just briefly, in your job description? What do you do? 6 7 I am in charge of manufacturing Α. 8 administrative functions at Packaging Personified, 9 which entail the manufacture of flexible packaging 10 and some systems that allow that to get out the 11 door. 12 Q. And when you previously testified 13 what was your position at Packaging? 14 Α. I believe I was already general 15 manager at that time. 16 Q. And have you held any other 17 positions at Packaging? 18 I was originally in sales, and I was Α. 19 also a plant manager. 20 Can you describe briefly what 0. 21 Packaging's business is? 22 Α. We are a manufacturer of flexible 23 packaging. That means we take resin, low density 24 polyethylene types of resins, and we make film out

Page 17 of it and from there we might print that film. 1 We would convert that film, which entails cutting it 2 3 and sealing it and shaping it into different 4 finished product configurations for customers to 5 The finished product is used in the food use. 6 industry, bread bags, ice bags, et cetera. 7 So you are referring then to the --0. what the consumer would call the plastic bag the 8 9 loaf of breads comes in? 10 Α. Yes. 11 0. Does Packaging print all of the film 12 that it produces? 13 Α. No. 14 Q. Does Packaging -- strike that. 15 Approximately, what amount of 16 your film that you produce gets printed? 17 Α. Approximately, one-third. 18 When you print that, do you print Q. 19 the entire -- with the film or --20 No. Α. It would depend on the 21 customer's design. Most of the time, it's 22 actually much less than the entire package. 23 Ο. Without getting into specific 24 numbers, can you quantify the percent of the gross

V = VPage 18 sales that would be attributed to film that is not 1 2 printed? 3 I would have to approximate that to Α. be about two-thirds of our overall sales, 4 5 potentially slightly more. 6 Q. You heard the Hearing Officer read 7 the questions that the Board posed and directed 8 the parties to respond to this morning? 9 Α. Yes, I did. 10 You have previously read the Board's 0. 11 opinion? 12 Α. Yes, I have. 13 At issue is the shutdown of press 4 0. 14 and the transfer of business from press 4 to press 15 5. When did you shut down press 4? 16 Α. Approximately, December of 2002. 17 0. And that was when you stopped using 18 press 2 as a printing press? 19 Α. Press --20 MR. GRANT: Do you mean press 4? 21 BY MR. HARSCH: 22 0. Press 4. Excuse me. 23 Α. Correct. 24 Before you there is a stack of Q.

Page 19 1 exhibits, I believe. I have previously marked 2 Respondent's Exhibit 59. Would you take a look at 3 that? 4 Α. Yes. 5 Q. And did you prepare this document? 6 Α. Yes, I did. 7 And can you explain what it is? Q. 8 The top half of the document is Α. 9 information that I took off of a report that had 10 the information titled VOC Reporting to Edwin C. 11 Bakowski, IEPA, provided through Mostardi & Platt, May 13th, 2009, a FESOP Application Request. 12 13 MR. HARSCH: And I believe that is 14 Exhibit 49 in the -- in this case, the actual 15 FESOP application, Respondent's Exhibit 49. 16 MR. GRANT: I have Respondent's 49 17 as being a letter dated May 13th, 2009. Is that 18 the FESOP ap? 19 MR. HARSCH: Yes. 20 MR. GRANT: Okay. 21 BY MR. HARSCH: 22 Would you explain what you were Ο. 23 intending to show through that -- the information 24 that you obtained from what was marked as --

Page 20 1 accepted as Exhibit -- Respondent's Exhibit 49? 2 This -- this report --Α. Yes. 3 HEARING OFFICER HALLORAN: Excuse 4 me. Respondent's Exhibit 59 or 49? 5 MR. HARSCH: It's from Exhibit 49. 6 MR. GRANT: It's Respondent 7 Exhibit 59 taken from Respondent's Exhibit 49. 8 HEARING OFFICER HALLORAN: 9 Mr. Imburgia is reading off of Respondent's 10 Exhibit 59? 11 MR. GRANT: Correct. 12 HEARING OFFICER HALLORAN: Thank 13 you. 14 BY THE WITNESS: 15 I attempted to use the VOC reporting Α. information that had been collected and captured 16 17 back at that point in time, and submit it to the EPA to develop a relationship or correlation 18 19 between years when we had known production and 20 correlating the VOC emissions to the amount of 21 production that we had in our printing area. 22 BY MR. HARSCH: 23 So this chart would have been then Ο. 24 from your records at that time of the VOC

Page 21 1 emissions in tons per year? 2 Α. Correct. 3 0. And looking at it, it would show 4 then no emissions from press 4 in 2003? 5 Α. Correct. 6 Q. It's in the prior record. Presses 1 and 2 were the water-based presses? 7 8 Α. Correct. 9 Ο. And can you explain what the lower 10 table is in Respondent Exhibit -- what's marked as 11 59? 12 Α. Yes. The lower table is collecting the VOC information from press 4 and press 5 and 13 14 adding it to become a total amount of VOC. 15 And are those figures from monthly 0. 16 records that Packaging maintains? 17 Α. I obtained these figures from the document that I referred to, the FESOP application 18 19 request. That document had been prepared by Rich 20 based on purchase records that were readily 21 available at the time. 22 Ο. And the lower table for those 23 various columns, are those monthly numbers? 24 Α. The lower table was the Yes.

Page 22 information available from our production records 1 2 that at this point in time only go back to year 3 2000 for pounds produced out of the press room, 4 the off-line presses. And I correlated that information of pounds produced compared to VOC 5 6 reported to come up with a relationship. That 7 relationship is shown in the very bottom row as 8 61.82, 55.42, 75, et cetera. I then averaged from 9 year 2000 to 2003 to come up with 60.81. 60.81 is pounds of material produced per VOM, if I am 10 11 remembering my math correctly. 12 MR. HARSCH: I would at this point in time move for entry of Respondent's Exhibit 59. 13 14 HEARING OFFICER HALLORAN: State? 15 MS. SANGHA: No objection. 16 HEARING OFFICER HALLORAN: Okay. Thank you. So admitted. Respondent's Exhibit 59 17 18 is admitted. 19 (Whereupon, RESPONDENT'S Exhibit 20 No. 59 was admitted into 21 evidence.) 22 BY MR. HARSCH: 23 Next, turning your attention to what Ο. 24 I have marked as Respondent's Exhibit 60 that's in

Page 23 front of you, and can you explain -- did you 1 2 prepare this document? 3 Α. Yes. This is part of an ongoing record that we have kept, and it is an 4 5 accumulation or a total of both pounds and footage produced for the off-line presses gathered on a 6 7 monthly basis since the year 2000 to the current 8 year. 9 0. And by off-line presses, those would 10 be the solvent-based flexographic presses? 11 Α. Correct. Press -- what have been 12 referred to as press 4 and press 5. 13 0. And subsequently have you added 14 additional presses? 15 Α. Yes. We have added a press. In 16 2003 it started in production. We refer to it as press 6. We have also added a press in 2000 --17 18 sometime in 2012 referred to as press 7. 19 Ο. And those presses are ducted and controlled by the RCO unit that we have previously 20 21 testified to? 22 Α. Yes, they are. 23 Q. Is press 5 currently in operation? 24 Α. No, it is not.

Page 24 1 Is Respondent's Exhibit 60 a true Q. 2 and accurate copy of your -- a printout of your 3 record? 4 Α. Yes, it is. 5 MR. HARSCH: I will move for the 6 admission of respondent Exhibit 60. 7 HEARING OFFICER HALLORAN: State? 8 MS. SANGHA: No objection. 9 HEARING OFFICER HALLORAN: Okav. 10 Thank you. Respondent's Exhibit No. 60 is 11 admitted. 12 (Whereupon, RESPONDENT'S Exhibit 13 No. 60 was admitted into 14 evidence.) 15 HEARING OFFICER HALLORAN: 16 Mr. Harsch, could you give me a brief summary of 17 exactly what this table -- I know it's from his 18 ongoing record, but for Board purposes where I can 19 mark it? 20 BY MR. HARSCH: 21 Q. It is a record of the monthly 22 production by year in both press -- pounds of 23 product and press footage, footage beginning with 24 2005. Is that correct?

Page 25 1 Α. Yes, it is. 2 And you -- Packaging -- does Q. 3 Packaging weigh the film that it prints? 4 Yes. Every role of film that's Α. 5 printed is weighed immediately as it leaves the 6 press as part of a production record to track both 7 efficiency and waste. 8 Ο. And I see that your footage record 9 only goes back to 2005. Why is that? 10 Α. It was determined by someone who was 11 an employee of Packaging Personified, Tim Piper, 12 that the previous records were less than accurate 13 because of the method of collecting that 14 information at the time. 15 Ο. Mr. Piper previously testified in 16 this proceeding? 17 Α. Yes, he has. 18 0. Was that method an estimate based on 19 footage of -- or the square footage of printed 20 material? 21 There is a meter on the front of the Α. 22 press that actually counts the footage, but our 23 discipline in capturing that number on a 24 consistent basis was not very effective.

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Q. There is a box down at the bottom of that table in red. What is -- can you explain what that is?

4 Α. Since this is an important ongoing 5 record of production, any changes to it we try to 6 notate and make sure that it's as obvious to 7 someone who would read it as to what it is. Tim 8 had actually eliminated the footage totals for 9 previous years as erroneous and we made the note 10 that that change was made.

Q. Okay. The production records maintained in pounds in the upper portion of this table, for the -- what does it show that you printed in 2003?

A. 2003, it shows a total of
6,024,683 pounds per year.

Q. And if you compare that figure with all of the previous years going back to 1995, in pounds, as shown in Exhibit 60 and Exhibit 59, what does that show in terms of --

A. It shows that the pounds produced -excuse me.

The pounds produced in 2003
exceeded the pounds produced out of the press room

Page 27 1 in all previous years. 2 Ο. What conclusion do you draw from 3 that? 4 We grew in sales, and produced it Α. 5 out of our press room. 6 And you produced it in 2003 using Q. 7 only press 5? 8 Α. Correct. 9 0. Do you believe that Packaging had 10 the capability of not operating press 4 beginning 11 in 1995 and transferring all of the business to --12 and all the production to press 5? 13 Α. Based on what we did in 2003, yes, I 14 do. 15 Can you explain to the Board what a Q. 16 typical operation is for a shift in operating either press 4 or press 5 or any other presses, 17 18 for that matter? 19 Α. Can I refer to one of the other 20 documents? 21 0. In general, first, sure. 22 Α. Okay. So it's --23 0. In fact, we might as well go to that 24 document. If you look at Respondent Exhibit 61,

Page 28 1 did you prepare this document? 2 Α. Yes, I did. 3 And can you explain what 0. 4 Respondent's Exhibit 61 is? 5 Α. Yes. What this is, is based on 6 known outputs, averages and some assumptions, what 7 we would anticipate average production to be along 8 with the average number of changeovers, including 9 startup and shutdown for the piece of equipment. 10 These assumptions were shown for both press 4 and 11 press 5, and individually shown for a one-shift 12 operation, a two-shift operation and a three-shift operation for press 4, and a one, two, three and a 13 14 four-shift operation for press 5. 15 Q. And these assumptions were based on 16 your experience as managing the press room? 17 Α. Yes. 18 Press 4 is -- is press 4 a slower Q. 19 press than press 5? 20 Α. Yes, it was. 21 0. Did press 4 print less colors than 22 press 5? 23 Α. Yes, it did. 24 Q. If a press has an average run speed,

Page 29 what do you expect to -- what speed do you 1 2 actually run that press? 3 Α. It varies from item to item, based 4 on design, based on difficulty of print, but we would like to see us run anywhere from 70 percent 5 up to very, very occasionally 100 percent. 6 If we average close to 80 percent, we are generally 7 8 pretty darn happy. 9 Ο. And what number did you use in 10 preparing Exhibit 61? 11 I used 80 percent and 85 percent, Α. 12 based on the differences in the presses and their 13 age. 14 In general terms, is press 5 a newer Ο. 15 press than press 4? 16 Yes. Α. Press 5 was newer and based on 17 its years of service or the fact that it was 18 newer, it was more reliable at that point in time. 19 0. Are there any differences in the 20 efficiency of operation? 21 Α. Yes. We would expect because of its 22 increased reliability, that it's more efficient 23 than its -- than the other piece of equipment, as 24 well as the fact that it was -- as it was built,

Page 30 1 it was a newer machine, had newer technology and 2 had more capacity nameplate as far as its highest 3 speed and its changeover time. 4 0. Can you explain what setup time is 5 per color, that column? 6 Α. Setup time per color is an estimated 7 amount of time required to take -- from sleeves or 8 cylinders in and out of a press and change inks in 9 and out of a press to go from one custom job to 10 another custom job. 11 How long do your job runs normally 0. 12 last? 13 Α. They vary significantly, but we will 14 have jobs that might last in printing terms less 15 than an hour to -- of full production time of 16 printing to jobs that might last almost a full 17 day. 18 Q. Is that typical for the flexographic 19 printing industry? 20 Α. Yes, it is. 21 0. And what expected setup time did you 22 use for press 4? 23 Α. Expected setup time for press 4 was 24 45 minutes per color.

Page 31 1 Q. And for press 5? 2 Α. 15 minutes per color. 3 Q. Why is there a difference? 4 Α. Press 5 actually had features referred to in technical terms in our industry as 5 6 automatic grafting, meaning that you could load a new cylinder and actually tell the press what size 7 8 cylinder it was, and it would know how to bring 9 that cylinder in position to begin your setup. 10 That saved a significant amount of time while we 11 were setting the piece of equipment up. 12 It also had what was referred to 13 as a preregistration feature, automatic gear 14 meshing, and based on the same information, it 15 would also rotate the cylinder in the gear so that 16 when they were engaged at setup, they were very, 17 very close to proper registration. Both were 18 features that were not available on the other 19 press. 20 0. And the next column, expected 21 average daily setup time, can you explain what 22 that is and how you arrived at that? 23 Α. All I did was multiply the number of 24 colors that we would have typically set up during

Page 32 1 a shift by the expected amount of time that it 2 would take to set up the colors per piece of 3 equipment. 4 0. Was press 4 a three-color press? 5 Α. Press 4 had four decks that were 6 utilized or capable of being utilized. On average 7 we ran less than four colors based on what was 8 available to print. 9 0. And you used three colors? 10 Α. Three colors was just an average 11 number that was most typical. 12 Ο. And on press 5 you are showing it --13 as I understand it, an average number would be 14 five colors? 15 Α. Correct. 16 0. If you transferred a job from press 17 4 to press 5 that only was three colors, what effect does that have on the average setup time? 18 19 Α. That would mean that the job would 20 be -- and I would anticipate that a three-color 21 job setup on press 5 would be up and running in 22 the amount of time it took to get one of the 23 colors set on press 4. 24 Ο. And the next column is entitled,

Page 33 1 estimated total hours scheduled. That's eight 2 hours per day, correct? 3 Α. Correct. 4 Q. Estimated end of a shift startup and 5 shutdown cleaning time. Can you explain what that 6 is? 7 Α. When you shut down one of these 8 pieces of equipment, you actually have to drain 9 ink out of each station and wipe off that station, 10 wipe off the anilox rollers, recover all of the 11 inks so that they can be used or reused, you know, 12 at a later date or at startup, and then those have 13 to be secured into each storage area, and you have 14 to make sure that the -- generally we will wipe 15 down what's called the nip roller and the drum and 16 basically put the machine into a clean and 17 organized state before we walk away from it. 18 Q. And -- and that would be true -- you 19 have to clean it then if you are operating on a 20 one-shift or two-shift per day basis? 21 Α. If you stop running the piece of 22 equipment, you need to make sure that all of the 23 ink is very carefully removed and that it's 24 cleaned off of any surfaces so it doesn't dry on

the equipment, because it can damage the equipment if it dries on it.

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Q. Does the -- if you operate a press around the clock 24 hours, then do you have to clean it up that day?

A. No, because you never create an opportunity for the inks to dry and on a piece of equipment you will go from one color to another color in transition, which is counted in our setup time.

Q. If you operate then on a three-shift basis, but don't operate over the weekends, do you have to clean it up then when you shut it down at the end of the week then?

A. Yes, you do. At any point in time when you are going to shut down a piece of equipment to actually not operate it for any extended period, several hours, then you have to do a complete wash down.

20 Q. And that's reflected in the number 21 of hours you have in that column?

A. Correct.

Q. What does the next column, expected net daily run hours, mean?

Page 35 1 Α. Basically, you take all of the 2 assumptions. You take the available hours for the 3 day, you subtract the setup time that is 4 anticipated, you subtract the shutdown time, 5 startup time, that is anticipated, you multiply it 6 by the -- well, I'm sorry. Did you ask for the 7 net daily run hours? 8 0. Expected net daily run hours. 9 Α. Yeah. Take the total available 10 hours, subtract the setup time and any other down 11 time that would be expected. 12 0. And then the next column is just the 13 number of days per week on a one-shift basis, 14 two-shift, whatever? 15 Correct. Α. 16 0. What is the next column, expected 17 end of week startup and shutdown PM and cleaning 18 time? 19 Α. There is a more extensive cleaning 20 that would be done on a weekend type shutdown 21 where you go through more activities on the press 22 to make sure that for that period of time it 23 was -- it was, you know, prepared -- properly 24 prepared to not run.

V 1 Page 36 1 And that's the same number whether 0. you are operating one, two or three shifts? 2 3 Α. Correct. 4 0. The next column, expected daily 5 output, can you explain what that is? I'm sorry. 6 Expected net weekly run hours. 7 Α. Expected net weekly run hours is, 8 again, the net daily hours, times the number of 9 days available, minus the weekend shut up/start 10 down -- startup/shutdown activity. 11 And the next column, expected daily Q. 12 output, can you explain how you arrived -- what 13 that is and how you arrived at it? 14 Expected daily output is the daily Α. 15 hours -- I believe I might have an error in my -the title of that column. Seven times -- yeah. 16 Ι 17 believe that's weekly. Someone can -- I believe 18 that's a weekly number. 19 So expected net weekly run hours 20 times the run rate at its expected efficiency 21 So the effective run rate times the number. 22 hours. 23 And expected monthly output? Q. 24 Α. Expected monthly output is to take
that exact amount of weekly output times the available weeks in a month.

3 0. And then the average weight, how is 4 that used then to arrive at the last column? 5 That is the average weight for Α. 6 1,000 feet based upon historical records, and we 7 took the total amount of footage, multiplied it by 8 the average weight to come up with an amount of 9 pounds that would generally be associated with 10 that amount of weight, that amount of footage. 11 If you compare then the output at --Ο. 12 is the last table then the amount of production 13 you would expect and actually be able to produce 14 through the normal operations that you just 15 described on a one-shift, two-shift, three-shift 16 basis? 17 Α. Yes, it is.

Q. At the time you shut down press 4, was it operating in approximately two shifts or three shifts?

A. I believe it was a two-shift
 operation.

Q. And does the lower columns then show the expected capacity in pounds of product printed

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Page 38 1 for press 5 on a one, two, three and four-shift 2 basis? 3 Yes. Α. It's all of the same 4 assumptions with the different -- specific 5 information regarding the different -- the only 6 differences are a difference in setup time, a 7 difference in efficiency and expected run rate. 8 0. At the time you shut down press 4, the end of 2002, what was press 5 operating at in 9 10 terms of normal shift operation? 11 Α. I believe it was three shifts, but 12 I'm not positive. 13 Historically then going back to --Ο. 14 if I understand Exhibits 59 and 60, the production was greater in 2003, and 2002 was slightly less; 15 16 is that -- am I correct? 17 Α. Yes, you are. 18 MR. GRANT: I am going to object on 19 the basis of leading. He is testifying as to what 20 he wants the information to be. 21 HEARING OFFICER HALLORAN: 22 Mr. Harsch? 23 MR. HARSCH: I just asked the 24 question, was 2002 less than 2003, and was 2002

 $\ell = f$ Page 39 1 greater than all the previous years before that. 2 MR. GRANT: He is testifying. 3 HEARING OFFICER HALLORAN: Yeah. It 4 is leading, Mr. Harsch. If you could rephrase it. 5 Objection sustained. 6 BY MR. HARSCH: 7 Can you please go through the Ο. 8 production records that you had presented in 9 Respondent's Exhibit 59 and explain what you 10 believe to be the relationship between the output 11 production from press 4 and as it relates in the 12 previous years to 2002? 13 Α. Yes. As far as press 4, it shows 14zero production in 2003, and press 5 shows 15 significantly more production than it did in 16 previous years. 17 Ο. Can you draw a conclusion regarding 18 the expected capacity in pounds of production from 19 press 4 even on your maximum production on a 20 three-shift basis -- two-shift and three-shift 21 basis as compared to press 5 operating on a 22 four-shift basis? 23 Well, I think the best answer to Α. 24 that question is the empirical information. In

Page 40 1 2003, we only ran press 5. In 2003, we ran more 2 production out of the press room than we had run 3 in any previous year in the company's history. 4 So I was pleasantly surprised at 5 that point in time, but I believe that the best 6 information and the best way to answer that 7 question is the empirical evidence that we 8 produced more in 2003 than we ever had in the 9 company's history only utilizing press 5. 10 Ο. And Exhibit 61 would show the 11 maximum -- what you think would be the maximum production on press 5 over a four-shift operation? 12 13 Α. Yes, I believe that to be a 14 conservative estimate of what I would anticipate 15 our production capability to be. 16 Were you responsible -- who at Ο. 17 Packaging was responsible for purchasing press 5? 18 Α. I was involved in purchasing press 19 5. 20 0. Were you involved in purchasing 21 press 6? 22 Yes, I was. Α. 23 0. And press 7? 24 Α. Yes.

Page 41 1 Can you explain how you go about Q. 2 buying a press -- Packaging buys a press? 3 Yes. Actually, in the purchase of Α. any capital equipment, we would evaluate what we 4 5 believe to be the most effective technology 6 available in the industry or available to the 7 industry, and then compare the investment cost for 8 that, the operating cost for that, to what our 9 current operating costs are, and trying, within 10 our budget, to buy the most effective technology 11 available. 12 In very general terms, what are the 0. 13 differences in -- are there differences in 14 improvements between presses 4, 5, 6 and 7? 15 Α. Similar to computers, technological 16 advancement in printing presses have been 17 significant over the past, you know, 15 to 20 years and continues to be very, very 18 19 significant, and things that are focused on by 20 capital equipment suppliers in trying to develop a press that, you know, is saleable are energy 21 22 efficiency, ergonomics, automation. 23 So they basically are -- and 24 they will put together in their effort a return on

¹ investment for the end users, and they will give ² you the opportunity to plug in your numbers, cost ³ of electricity, cost of gas, cost of labor. They ⁴ will give you an opportunity to plug in numbers to ⁵ help validate their assumptions.

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6 And presses are faster to set 7 Presses require less footage to waste to set up. 8 They utilize less energy. They have become up. 9 more ergonomically efficient requiring less labor 10 to be able to produce higher output; changes in 11 the mandrel system that allows a press to print. 12 Based on advancements in carbon fiber, reduced 13 bouncing, which means that there is less 14 mechanical stress that allow presses to run 15 faster. Our newest press can run 1486 feet per 16 minute, as opposed to our oldest press' top speed 17 mechanically available was 600 feet per minute on 18 press 4. It was 900 feet per minute on press 5. 19 It is 1144 feet per minute on press 6. Thev 20 become faster, use less energy to the extent that 21 it has been my practice to prefer to replace 22 capacity, as opposed to add capacity.

Q. Can you explain that, please?
A. There comes a point in time when you

Page 43 evaluate whether operating an older, less 1 2 efficient piece of equipment makes monetary sense, 3 compared to the cost of actually totally replacing 4 its capacity with another piece of equipment that 5 would potentially gain you an additional 50 percent in capacity, but with the same labor, 6 7 potentially with less waste, potentially with less 8 energy usage to achieve all of the same things. 9 0. At the time you purchased press 5, 10 were you aware of the environmental regulations 11 that applied to press 5? 12 Unfortunately, I was not. Α. No. 13 Were you given any guarantees Ο. regarding expected emissions from press 5 in terms 14 of complying with environmental regulations? 15 16 Α. No, I was not. 17 Was -- is press 5 a -- what we refer Q. 18 to as a recirculating oven press? 19 Α. Yes, it was. 20 Will you explain what that is? Ο. 21 Press 5 had the ability to return Α. 22 exhaust air from the drying sections back to --23 before the oven section, it would take the air and 24 heat it up, allowing not only warm air to enter

Page 44 the oven, but also, as it was explained to me --1 2 but allowing for heat to be generated from the 3 consumption of the VOCs through the process. 4 Q. Are those VOCs -- that's the -- from 5 the solvent that's used to apply the ink to the 6 substrate? 7 Α. Yes. 8 0. So press 5 then when you purchased 9 it was sold to you as a press that would save 10 energy by this recirculating function? 11 Α. Yes. That's one of the things that 12 was evaluated when we were trying to determine which piece of equipment to buy, was energy 13 14 efficiency, reliability of design, et cetera. 15 Up until the time that press 5 was 0. 16 modified to hook up to the control device that you 17 testified to in the earlier hearing, did you 18 always operate press 5 in this recirculated 19 manner? 20 Α. Yes, we did. 21 Was there, in fact, any ability to Q. 22 operate it otherwise? 23 Not to my knowledge. Α. 24 Q. If a given amount of ink is applied

Page 45 to a square footage of substrate, is it necessary 1 2 to provide -- where does the energy come from to 3 evaporate the solvent that's in that ink as 4 applied to the --5 Α. The energy to evaporate the solvent 6 that's -- or the ink that's applied to the 7 press -- or to the film, I'm sorry, comes from the 8 oven. So any air entering the oven needs to be 9 heated to a certain temperature to create an 10 environment that will allow that solvent to 11 evaporate. 12 Is it always necessary to dry the Q. 13 ink, evaporate the solvent, when you are doing 14flexographic printing? 15 Α. Yes, it is. 16 ο. In layman's term, is that because 17 the -- when you roll it up, it would smear or --18 Α. Yeah. It just won't be dry. It's 19 like painting a wall. You need it to dry before 20 you can use it. 21 In press 4, where did that energy 0. 22 come from? 23 In press 4, it was -- the intake air Α. 24 was ducted directly from outside fresh air, and we

Page 46 would take whatever the normal temperature air of 1 2 the day was and heat it to the necessary 3 temperature to dry the ink. 4 And what did you use to heat the Ο. 5 air? 6 Α. It was a natural gas oven. 7 Ο. And in press 5, where did the energy 8 come from? 9 A lot of the energy, based on my Α. 10 understanding of the process, was -- was -- a lot 11 of the need for energy was reduced in the mere 12 fact that the heated air was recirculated, and 13 then additional energy was reduced by the fact 14 that VOCs could be used for energy to create heat. 15 Q. So producing the same amount of 16 square footage with the same amount of ink applied would cost Packaging less in press 5 than press 4? 17 18 Α. That's what I would anticipate. 19 Ο. What happened to the workers -- when 20 you shut down press 4 at the end of 2002, what 21 happened to your workers that previously worked on 22 press 4? 23 Α. They were trained to run on press 5 24 for the additional shifts required.

Some of them

Page 47 1 were actually absorbed into other areas of the 2 press room, because we ended up with more people 3 than we needed at that point in time. 4 0. Take a look at, please, the --5 what's marked as Exhibit 64 in front of you, which 6 is Mr. McClure's letter to Mr. Simon dated 7 August 9, 2012, and attached to that letter, the 8 last page. Are you familiar with this document, 9 the last page? 10 The very last page, yes, I am. Α. 11 0. And what is that document? 12 Α. That's a bill for the -- the testing 13 of our oxidizer that was conducted in 2004. 14Q. And that was the testing of the 15 oxidizer that press 5 and press 6 were hooked up 16 to? 17 Α. Press -- yes. Press 5 and press 6, 18 correct. 19 And was this provided to Mr. McClure 0. 20 by Packaging? 21 Yes, it was. Α. 22 And that's the cost of the stack 0. 23 test? 24 Α. Yes, it was.

Page 48 1 As far as you know, that's true and 0. 2 accurate? 3 Α. Yes, absolutely. 4 Q. Do you recall whether or not 5 Packaging applied for the -- do you recall Packaging applying for the ATUs as part of the 6 7 ERMS program? 8 Yes, I have --Α. 9 MR. GRANT: I am going to object on 10 the basis of relevance. We have very limited 11 issues in this case, and none of them has anything 12 to do with ATUs. Maybe you can explain, Mr. 13 Harsch, but we are not going to retry 2009. 14 MR. HARSCH: No. I'm just -- we 15 will get to it in the question. 16 HEARING OFFICER HALLORAN: You may 17 proceed. 18 BY MR. HARSCH: 19 And that was previously testified to 0. 20 by Mr. Piper? 21 Α. Yes. 22 Did Packaging receive a bill from Ο. 23 Illinois EPA to purchase the emissions ERMS 24 credits?

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1	A. Yes, I believe we did.
2	Q. And did you pay that bill?
3	A. Yes, I believe so.
4	Q. And would you or would Mr. Trzupek
5	be a better witness to testify to as to the basis
6	for that the application and the how those
7	credits were calculated.
8	A. Unfortunately, Mr. Trzupek.
9	MR. HARSCH: Okay. I will defer the
10	question. At this point in time, I have no
11	further direct questions.
12	MR. GRANT: Can we have a short
13	break?
14	HEARING OFFICER HALLORAN: All
15	right. I didn't hear what Mr. Harsch said. At
16	this point I am going to
17	MR. HARSCH: I have no
18	further direct.
19	HEARING OFFICER HALLORAN: Okay.
20	Thank you. For how long? Because we started
21	late.
22	MR. GRANT: Five minutes.
23	HEARING OFFICER HALLORAN: Off the
24	record for five minutes.

Page 50 1 (Whereupon, a short break was 2 taken.) 3 HEARING OFFICER HALLORAN: We are 4 back on the record. People, you are up. 5 CROSS-EXAMINATION 6 BY MS. SANGHA: 7 Okay. This is Nichole Sangha for 0. 8 the Attorney General's Office. I am going to do the cross-exam of Joseph Imburgia. 9 10 Mr. Imburgia, you are familiar 11 with annual emissions reports? 12 Α. Yes, I am. 13 0. And you are aware then that these 14 were your annual emissions reported to the 15 Illinois EPA each year with the data from the 16 prior year? 17 Α. Yes. 18 0. Right. And those are done each 19 year. So, say, for 2002 you would report that the 20 next year before May 1st of that year? 21 Α. Yes, I believe so. 22 0. Yes? 23 Α. Okay. 24 Q. That's fine. You report it at the

Page 51 1 first part of the next year? 2 Α. Okay. Yes. 3 Q. And would you agree that Packaging 4 uses the best available data that it has on its 5 facility and the emissions when it goes to do that 6 reporting to the Illinois EPA? 7 Α. Yes, it does. 8 And for the period at issue in this 0. 9 case, 1995 or part of the period at issue in this 10 case, 1995 to 2001, those annual emissions reports 11 weren't done in the year that they were -- would 12 have been due to be reported, because you were not 13 aware of your obligations at that time? 14 Correct. Α. 15 And in 2002, 1995 to 2001, those Q. 16 annual emissions reports were created 17 retroactively? 18 Α. Correct. 19 But when you did that reporting in Ο. 20 2002, you used the data that was the best 21 available data to you that you had at that time to 22 do that retroactive reporting? 23 Yes, we did. Α. 24 Q. I want to ask you about this chart

Page 52 1 that you have marked as Respondent's Exhibit 59. 2 From what I understand, this 3 number 60.1 that you have on here, that's a factor 4 that you created where you took the data that --5 for the years where you had the data both VOM and of pounds of substrate, you created a relationship 6 7 between those two things and created this factor? 8 Α. Yes, I did. 9 0. And then will you agree that at one 10 time this was a cover sheet to a series of 11 additional charts that broke down per year, 12 different estimations? 13 Α. Yes, it is. 14 Q. And when previously we had some 15 questions about that document, we looked back at 16 the years 1995 to 2001 where you had taken this 17 response factor or this relational factor and you 18 had taken pounds of substrate, which is data that 19 you had and attempted to calculate VOM emissions 20 from press 4 and press 5 based on this factor. 21 Isn't that right? 22 Actually, I was attempting to Α. 23 re-create the pounds of production based on the available VOCs. 24

Page 53 1 Pounds of production based on Q. 2 available VOCs? 3 Since -- when this information was Α. 4 requested, we don't have production pound 5 information earlier than 2000 today. So I was 6 asked to try and generate information with regards 7 to operating hours and -- and a lot of other 8 information that was not readily available to me. 9 So I tried to take the information that was 10 available and --11 Ο. Create some estimates? 12 Α. -- create some estimates. So the 13 VOC emissions that are in this table are based on 14information that was reported to the IEPA back in 152009 when the information was more readily 16 The information that generated this available. 17 table also were actual purchase records. So it 18 was more empirical information. The information I 19 was missing was the amount of pounds produced out 20 of the press room, production pounds produced out 21 of the press room prior to 2000. 22 But in order to get to production 0. pounds out of the press room, you first estimated 23

pounds of VOM from each press. That was the first

24

Page 54 1 stop on your series of calculations? 2 Α. No. The VOM per press I took from 3 this table. What I did was based on the VOM from 4 this table, which is reported for press 4 and 5 press 5 individually, I then estimated the amount 6 of pounds of substrate that were produced that --7 based on the amount of VOM that was reported. 8 Ο. But in order to get the estimated 9 footage, you did that by press, correct? 10 Α. I did that by press. 11 Ο. And so for each press you have to 12 attribute a certain amount of VOM to that press in 13 order to be able to make the calculation of 14 estimated footage? 15 Α. Correct. But I took the VOM 16 information from this first table, and that table 17 was old information that had been reported to IEPA 18 through Mostardi & Platt on May 13th of 2009 as 19 part of the FESOP application. 20 But you didn't take the allocation Ο. 21 per press from that. You generated that yourself? 22 The allocation per press I took Α. No. 23 based on this document, which was our FESOP 24 application, if I am reading it correctly.

Page 55 1 Do you recall that we discussed the 0. 2 numbers in that chart, and we compared them to the 3 annual emissions report, and there was a 4 discussion about the fact that your chart differed 5 substantially from what was in the annual 6 emissions report? 7 Α. I do recall that, during the 8 deposition that there was some questions with 9 regards to how numbers tied up, yes. 10 0. And that --11 MR. HARSCH: I will object unless 12 you can be more specific. I think you stated 13 earlier that there were a number of charts that 14 were discussed during the deposition, and you are 15 referring to a single chart here. 16 HEARING OFFICER HALLORAN: These are 17 things we've seen. 18 MR. HARSCH: All I would like is 19 when you are referring to the charts, try to be 20 specific as to which chart you are referring to. 21 MS. SANGHA: Okay. Well, you 22 submitted just the cover page to what was an 23 extended report in which this response factor was 24 applied to a series of -- to calculate a series of

1 numbers.

2 When you just have the response 3 factor it's difficult to tell what happens to that factor when you begin to apply it to real numbers. 4 5 We can submit the full chart into evidence and ask 6 questions about that, or I can just ask general 7 questions related to when this response factor was 8 applied, it did not yield results that were 9 consistent with any of the other records that were 10 in evidence.

HEARING OFFICER HALLORAN: You know,
 I think, I am going to overrule that objection.
 Mr. Harsch, you can qualify it on redirect if need
 be. Thank you. You may proceed.

15 BY MS. SANGHA:

Q. So wouldn't you agree that when we looked at the estimated pounds of VOM in press 4 and press 5 that were in your charts that were originally attached to this cover sheet, they differed substantially from the annual emissions report?

A. I do recall that there were some differences identified at that point in time, but without that information, I can't speak to exactly

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Page 57 1 what those differences were. 2 Do you recall being deposed on May Ο. 3 1st, just a few weeks ago in this case? 4 Α. Yes, I do. 5 0. And that when you were asked this 6 question: "And you would agree that the numbers 7 that you reported in a good faith effort to 8 provide information, regardless of that, the 9 numbers that you have differed pretty 10 substantially from the numbers that were reported 11 in 2002?" Answer: "Yes." 12 I recall the conversation. Α. Yes. Ι 13 don't recall exactly which numbers we were 14 referring to at the time. I do recall the 15 additional charts that you are referring to that 16 back this up, and the part that was not estimated 17 was the VOM. The VOMs were taken from this first 18 chart. The part that was estimated was the pounds 19 produced of -- production pounds produced. 20 Q. Mr. Imburgia, when did you create 21 this chart that's Exhibit 59? 22 Α. I don't see a date on it, but it was 23 relatively recent. It was requested of me within 24 the last six months, I believe.

Page 58 So you prepared it for use 1 Q. 2 specifically in this case? 3 Α. Yes, I did. 4 0. And when did you create Respondent's 5 Exhibit 60? 6 That's been an ongoing record since Α. at least 2000 where the -- where the data is --7 8 starts. 9 0. And when did you put it together in 10 this format? 11 Α. It's actually been in this format since it was created. 12 13 And Respondent's Exhibit 61, when Ο. 14 did you create this chart? 15 Very recently, just prior to my Α. 16 deposition. 17 Just prior to your deposition. 0. So you had this chart when we took your deposition? 18 19 Α. Yes. 20 Q. And you produced this chart just for 21 use in this case; isn't that true? 22 Α. Yes. 23 I would like to ask questions now Ο. 24 about a document that we don't yet have marked,

1 1 Page 59 but we would like to introduce as our next 1 exhibit, which would be Complainant's Exhibit 21, 2 3 and I would first ask the witness some questions. 4 MR. GRANT: Will you stipulate to 5 that? 6 MR. HARSCH: I believe these are all 7 documents that are still in the record. 8 MS. SANGHA: This is not in the 9 record. 10 MR. GRANT: We stopped, I think, at 11 2001, which would have been submitted in 2002. 12 HEARING OFFICER HALLORAN: Okay. 13 What you handed me, Mr. Grant, was just the 14 exhibits from the last hearing? 15 MR. GRANT: No. These are the 16 exhibits we are using at the hearing today that we 17 are going to move in. 18 HEARING OFFICER HALLORAN: I just 19 thought I heard Complainant's Exhibit No. 21. 20 MR. GRANT: They consist of --21 MS. SANGHA: It's not in the binder. 22 HEARING OFFICER HALLORAN: Thev 23 consist of what? I'm sorry. 24 MR. GRANT: The original evidence

Page 60 1 documents of both complainants and respondents 2 from the 2009 hearing that were all admitted and 3 new ones that I have marked going forward from the 4 last complainant's exhibit that we used in 2009. 5 So they are all -- so we will 6 make sure -- and we have got the chart as to 7 what's in. I marked the exhibits for 2009 with 8 the identical number, which is why they are not 9 sequential. So those we know are in. The ones we 10 don't have in, we will move in. So it's a little 11 confusing, but --12 HEARING OFFICER HALLORAN: It's 13 really confusing. 14 MR. GRANT: It would have been more 15 confusing if I marked -- started with one and 16 there was Exhibit 18 from the --17 HEARING OFFICER HALLORAN: Anyway. 18 We are getting this all down. So I will have to 19 take a look at it, but in any event, proceed. 20 Exhibit 21. 21 May I hand the document MS. SANGHA: 22 to the witness? 23 HEARING OFFICER HALLORAN: Yes, you 24 may.

Page 61 1 BY MS. SANGHA: 2 Mr. Imburgia, you said you are Q. familiar with annual emissions reports? 3 4 Α. Yes. 5 Q. Do you recognize the document in 6 front of you? 7 Yes. Α. 8 Ο. What is it? 9 Α. It appears to be an annual emission 10 report for 2003. 11 0. And is that your name listed as a 12 contact in the paragraph there on the first page? 13 Α. Yes, it is. 14 And you are listed as well as a cc Ο. on the bottom? 15 16 Α. Yes. 17 And if you will turn to the second Q. page, is that your signature there? 18 19 Α. Yes, it is. 20 MS. SANGHA: I would like to move this into evidence as Complainant's Exhibit 21. 21 22 HEARING OFFICER HALLORAN: Any objections, Mr. Harsch? 23 24 MR. HARSCH: No.

Page 62 1 HEARING OFFICER HALLORAN: 2 Complainant's Exhibit 21 is admitted. 3 (Whereupon, COMPLAINANT'S 4 Exhibit No. 21 was admitted 5 into evidence.) 6 BY MS. SANGHA: 7 Joe, if you will, turn to --Q. 8 Mr. Imburgia turn to the third page of this 9 document. That gives the -- Packaging's annual 10 emissions for 2003. Would you agree? 11 Α. Yes. 12 0. And the total emissions for the 13 source for that year were identified as 50.69 tons 14 for the year? 15 Α. Yes, I see that. 16 0. If we look at your Exhibit No. 59, 17 you have listed as total emissions from press 5 18 only as 59.84? 19 Α. Yes, I do. 20 Would you agree that that number is Ο. higher than the total emissions that were reported 21 22 for that year for the facility? 23 Α. Yes. 24 That's all that I have for the 0.

Page 63 1 annual emissions report. I would like to turn 2 your attention now to an exhibit that's already in evidence. That's Respondent's Exhibit 12 from the 3 4 prior hearing, and it should be in your books. 5 Α. This book? 6 Ο. Yes, that's correct. 7 The document that we are looking 8 at is dated December 16, 2002. Mr. Imburgia, 9 would you agree that this is a letter from your 10 counsel at the time to Illinois EPA on behalf of 11 Packaging? 12 I apologize. I want to make sure I Α. 13 am on the correct document. 14 Take your time. 0. Sure. 15MR. HARSCH: I am lost. Where are 16 you? 17 MS. SANGHA: Respondent's Exhibit 12 18 in your book. 19 MR. HARSCH: Complainant or 20 respondent? 21 MS. SANGHA: Not complainant, 22 respondent. This is Packaging's exhibit. 23 HEARING OFFICER HALLORAN: 24 December 16, 2002?

Page 64 1 MS. SANGHA: Correct. 2 MR. GRANT: They are not sequential. 3 The respondent ones are after the complainant 4 ones. 5 BY THE WITNESS: 6 Α. December 16th, 2002? 7 BY MS. SANGHA: 8 That's correct. 0. 9 Α. Yes. 10 Q. And would you agree that this is a 11 letter from Packaging Personified to the Illinois 12 EPA from Packaging's counsel at the time? 13 Α. Yes, it is. 14 And if you will turn to the second Q. 15 page, it's noted that in this document -- I want 16 to point out that on the last sentence of the 17 fourth paragraph it notes that the information 18 included in the attachments is readily available. 19 Specifically, it says, two readily available and 20 relevant production records are the aggregate weight of plastic film processed in each press 21 22 each year and the linear feet of film run through 23 each press each year. 24 And would you agree that those

Page 65 are the records that you keep at Packaging? 1 2 Α. The aggregate weight --3 Ο. The aggregate weight of plastic film 4 and linear feet of production of film? 5 Α. Yes, it is. 6 And that your counsel was 0. 7 representing to Illinois EPA in this letter that 8 those were readily available records at the time 9 that this letter was submitted? 10 Α. Correct. 11 Let's turn to the chart that's 0. 12 attached to the letter. I would like to look 13 specifically --14MR. HARSCH: Hold on a second. 15 HEARING OFFICER HALLORAN: Off the 16 record. 17 (Whereupon, a discussion was had 18 off the record.) 19 HEARING OFFICER HALLORAN: Back on 20 the record. 21 BY MS. SANGHA: 22 Mr. Imburgia, I would like to focus Ο. 23 on the -- the attachment that's two boxes, a chart 24 on the top, chart on the bottom. The one on the

Page 66 1 top that says production, and underneath that the 2 columns that say production and in parentheses 3 feet. And underneath that you have listed for 1999, 2002 -- through 2002, year to date, the 4 5 production of feet from each press. Do you see 6 that? 7 Α. Yes. 8 0. And would you agree that for the 9 years 2000 and 2001 in physical production in feet 10 press 4 was producing approximately 43 percent of 11 the production for those two years, specifically 12 43.7 in 2000 and 43 percent exactly in 2001? 13 Α. Yes. 14And that in 2002, year to date, and 0. 15 again, the date of this letter was December 16th, 16 2002, so at the end of the year here, the 17 production in feet for press 4 has actually 18 surpassed the production in feet for press 5? 19 Α. Yes. 20 Q. So in 2002 just before the press was 21 shut down, Packaging was relying pretty heavily on 22 press 4? 23 Α. We produced an equal amount of 24 product on press 4 according to these records.

i i Page 67 1 Ο. And potentially even more product on 2 press 4? 3 Α. Correct. And would you agree that operating 4 0. 5 two presses at your facility gives Packaging more flexibility in terms of running its packaging and 6 printing operations, how many orders you can take, 7 8 how many --9 Α. If we are referring to the total capacity of our facility including both pieces of 10 11 equipment, yes. 12 Q. Greater flexibility. And that -- it 13 also would help in terms of if you had a 14 maintenance problem on one press, you wouldn't 15 have to stop all your solvent printing just to fix 16 that maintenance problem. You could continue 17 operating? 18 Α. If that were to occur, yes. 19 And so -- and would you agree also Q. 20 that in the past 20 years since 1993 Packaging has 21 always operated two presses other than the one 22 year in 2003 that Packaging was required to shut 23 down press 4? 24 Α. To the best of my knowledge, yes.

Page 68 1 0. And that at the time that this 2 enforcement action originally began, when press 4 was shut down in 2002, Packaging made some 3 4 representations to the agency at that time that 5 their intention was to replace press 4 with press 6 6? 7 Α. Correct. 8 0. And that your intention when press 5 9 was taken out of commission recently was to 10 replace press 5 with press 7? 11 Α. Correct. 12 Q. So each time you have taken a press 13 out of commission, it's been your intention to 14 replace that press with another? 15 Α. Correct. 16 0. And so, therefore, to always be operating two presses at the facility? 17 18 Α. That's how it's worked out, yes. 19 Q. So Packaging is really a two-press 20 operation? 21 Α. I don't know what you mean by that. 22 We have operated two presses, yes. 23 You have relied on two presses all 0. 24 of the last 20 years other than with the exception

Page 69 1 of the one year? 2 Α. Correct. 3 Q. And you have needed those two 4 presses to meet your customer demand? 5 Α. Based upon what we did in 2003, I 6 can't say that. 7 Q. Mr. Imburgia, I think covered under 8 direct exam was your involvement in the purchase 9 of press 5? 10 Α. Yes. 11 0. So you were the primary person involved in the researching and purchasing of that 12 13 press? 14Α. Yes. 15 And you were the primary person to Q. 16 have conversations with Uteco related to the 17 purchase of that press? 18 Α. Yes. 19 And you can confirm that they never 0. 20 claimed that it would destroy volatile organic 21 compounds? 22 It was not part of the discussion. Α. 23 Ο. And they never gave you a specific percentage then of volatile organic compounds that 24

	Page 70
1	would be destroyed?
2	A. No, they did not.
3	Q. They never made any claims about its
4	ability to meet federal or state standards related
5	to air pollution?
6	A. No.
7	Q. And that they never gave you a
8	guarantee related to the capacity of the
9	recirculating drying to control volatile organic
10	materials?
11	A. No, they did not.
12	Q. Okay. There was no manufacturer's
13	guarantee related to the recirculating dryer and
14	its control capacity?
15	A. There was no manufacturer's
16	guarantee regarding the controlling or destruction
17	of VOCs.
18	Q. Yes. That's what I am asking.
19	A. Right, yep.
20	Q. Thank you. In your position that
21	you are talking about the control capacity of
22	press 5, that's coming from the test that Trzupek
23	ran, the informal test on press 5?
24	A. Yes, it is.

Page 71 1 0. That's the only source of your 2 information about the control capacity of press 5? 3 Α. Yes, it is. 4 0. It did not come from the 5 manufacturer? 6 Α. It did not. 7 Q. I want to turn your attention now to what's Complainant's Exhibit 9 from the prior 8 9 hearing. I want to focus on the section related 10 to press 5, which I have given a red tab in your 11 books to help everyone find it. 12 All right. Mr. Imburgia, this is the section of your 2002 permit application 13 14 from Packaging Personified to the Illinois EPA. 15 Is it marked 4.1-1 in the top right Α. 16 corner? 17 That's correct. 0. 18 And I'm sorry. I skipped over 19 on the first page there; just to orient us, this 20 document dated June 28th, 2002, it should be the 21 very first page of that exhibit, and can you 22 confirm that that's your name listed there in the 23 paragraph indicating that you can be contacted for 24 further information about this?

Page 72 1 Α. Yes, I am. 2 0. Okay. Now, turning back to 4.1-1, 3 which is the red tab, Section 4, it lists the name 4 of the emission unit that's being discussed in the 5 section, solvent-based ink press number 5. 6 Do you agree that that's press 7 number 5 that's at issue in this case? 8 Α. Yes. 9 Ο. And if you will turn over a couple 10 of pages to 4.1-5, in paragraph 31 you are asked 11 to give an explanation of how emission compliance 12 is to be or was previously demonstrated, and you 13 list there a manufacturer's guarantee? 14 It's listed manufacturer's Α. Yes. 15 guarantee. 16 0. It's listed manufacturer's 17 guarantee, but no manufacturer's guarantee 18 existed; isn't that correct? 19 That is correct. Α. 20 And if you will turn a few more Ο. 21 pages to Section 4.2-1, this is Bates stamped IEPA 22 page 364, if that helps. 23 Α. 4-2- --24 4.2-1. 0.
	Page 73
1	A. Yes.
2	Q. And this is the section of your
3	permit that dealt with air pollution control
4	equipment. And under Section 4 where you list the
5	name of the unit, name of air pollution control
6	equipment and/or control system, you identify
7	there the internal thermal oxidizer?
8	A. Yes, that's what's on this document.
9	Q. And it's connected and in other
10	places on this page the manufacturer is listed as
11	Uteco. The construction operation here is listed
12	as 1995. The next page on number 11, the unit
13	that's listed as controlling is solvent-based ink
14	press number 5. Can we read that this internal
15	thermal oxidizer listed here was intended to
16	indicate the recirculating dryer on press 5?
17	A. I believe so.
18	Q. And if you will turn one page, in
19	paragraph 22 you again list that compliance,
20	initial compliance, is demonstrated or was
21	previously demonstrated through a manufacturer's
22	guarantee. Box 22?
23	A. Yes.
24	Q. And you even say specifically that

Page 74 1 the internal thermal oxidizer will destroy 2 90 percent of VOM? 3 Α. That's how it's filled out. Yes. 4 0. But the manufacturer never indicated that the recirculating dryer would destroy 5 6 90 percent of VOM, correct? 7 Α. No, they did not. 8 Q. And below that again in paragraph 9 23, you again reference a manufacturer's 10 quarantee. It states under an explanation of how 11 ongoing compliance will be demonstrated, Packaging indicates, under normal operating conditions, the 12 13 thermal -- internal thermal oxidizer will continue 14to destroy 90 percent of the VOM based on the 15 manufacturer's guarantee. 16 If you will turn over two more 17 pages, in the box that is box number 30, 18 subsection B? 19 Α. Yes. 20 For efficiency determination you Q. 21 point to the manufacturer's guarantee here two more times, both related to capture and control. 22 23 Would you agree? 24 Α. Yes.

Page 75 1 0. But there was no manufacturer's 2 guarantee, even though it's indicated five times 3 in this permit application? 4 Α. No, not a manufacturer's guarantee regarding destruction of VOC. 5 6 0. And the manufacturer didn't 7 guarantee the VOC destruction of the recirculating 8 dryer, because it wasn't originally designed to 9 destroy VOCs; isn't that correct? 10 Α. As it was explained to me, it was 11 designed to burn some of the VOCs to generate 12 heat. 13 It was designed to be an efficient 0. 14 dryer? 15 Α. Actually, it was presented to me 16 that it would burn some of the VOCs to generate 17 heat, reducing gas consumption. 18 But it wasn't created as a control 0. 19 device for the press? 20 Α. No. I believe -- if I may, 21 regarding what we are talking about, as far as a 22 manufacturer's guarantee and all this stuff, 23 unfortunately, I actually don't fill these 24 documents out, and how this, I believe, got

started is -- and the thought to test was a result of a comment that I brought to Rich saying, the manufacturer told me that this press will burn VOCs in place of burning gas or to reduce the gas consumption. It was based upon that, that further testing and investigation was done.

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Q. But now I have clarity that no
 manufacturer's guarantee was given relating to the
 destruction of VOCs?

A. Yeah. No guarantee of destruction of VOCs or control of VOCs, just a guarantee that it would burn some VOCs to reduce reliance on natural gas.

Q. And Packaging relied upon the manufacturer's guarantee in a permit dated June 2002, even though you had done an informal test in December of 2001; isn't that right? The informal test was in December of 2001.

A. I don't recall the order of events,
 and we mainly relied on expert support and what
 information was brought to us in generating these
 documents.

Q. But you can agree that there is no
 reliance in the June 2002 application on the

Page 77 1 informal test that was done by Rich Trzupek? 2 Α. I don't know the order of events 3 with regards to when this document was generated 4 and when the test was done. 5 Okay. Well, it's in the record that Ο. 6 the test was done in December of 2001. 7 Α. Okay. 8 0. This document is dated June of 2002. 9 Α. Okay. So if the test was done in 10 2001, and this document was created in 2002, my 11 assumption would be that Rich took that into 12 account when generating these forms. 13 But it's not listed here as your Ο. 14compliance -- your basis for compliance. Each 15 time you are asked for a basis for compliance, you 16 list the manufacturer's guarantee. 17 Α. That appears to be what's being said 18 here, yes. 19 And would you agree that all of your Ο. 20 presses have some sort of drying system on the 21 press? 22 Α. Yes. 23 Q. And that press 6, the newer Comexi 24 press actually also has a recirculating dryer?

Page 78 1 Α. Yes. It does have a method of 2 recirculating heat. 3 And that when press 6 was sold to Ο. 4 you, it was sold to you based on similar sales 5 points as press 5, that this was an efficient 6 This would be good for your business. drver. It 7 wasn't sold on the basis of being a capture 8 control device? 9 Α. No. Absolutely it was not sold as a 10 capture and control device. It was sold as an 11 efficient method of recapturing heat. 12 0. And there were similarities in the 13 way that press 6 was sold to you as the way that 14 press 5 was sold to you? 15 Α. Yes, similarities, but when press 5 16 was sold to me, one of the things that was told to 17 me was that it would actually consume some of the 18 solvent in the process to generate heat. 19 But neither press made any --0. neither seller made any representation about the 20 21 control of VOCs? 22 No, they did not. Α. 23 And when you bought press 6, it was Q. 24 immediately -- the emissions were immediately

Page 79 1 routed to the RTO? 2 Α. Correct. 3 0. So it was never operated without an 4 external control device? 5 Α. Correct. 6 0. And don't you think that if Uteco 7 had thought that the recirculating dryer on press 8 5 could function as a capture and control device, they would have added that as a sales point when 9 10 they sold it to you? 11 MR. HARSCH: I'll object to the 12 question. It calls for the conclusion of the 13 witness. 14 HEARING OFFICER HALLORAN: 15 Sustained. 16 BY MS. SANGHA: 17 Would you agree that there would be Ο. 18 value in the sale of a press -- if that press had 19 an internal control, that would be something that you would market if you were to sell a press? 20 21 MR. HARSCH: I'll object to the 22 question. 23 HEARING OFFICER HALLORAN: 24 Sustained.

 $\frac{V_{i}}{V_{i}} = \frac{V_{i}}{V_{i}}$ Page 80 1 BY MS. SANGHA: 2 Let's move on to what's marked as 0. Complainant's Exhibit 16 in your books. 3 4 Mr. Imburgia, do you recognize 5 this? 6 Α. Yes. 7 Q. What is it? 8 Α. It is our -- what we refer to as press 5, that is listed for sale through a 9 10 machinery broker. 11 So this is an ad for -- actually for Q. 12 press 5 that's at issue in this case? 13 Α. Yes. 14 Which is now for sale? 0. 15 Α. Yes. 16 And am I correct in understanding 0. that it's not operable at the facility anymore? 17 18 It's not in operation? 19 Α. Correct. 20 But that it remains operable? 0. 21 Α. Yeah, we would have to do some work 22 to get it back up in production, but yes. 23 Ο. It could be put back into 24 production?

Page 81 1 Α. It could be put back into 2 production. 3 For example, as the ad says at the Ο. 4 very bottom there, can be seen in running 5 condition, you could put it back in action to show 6 it to someone? 7 Α. Yes. 8 0. And also that in the list of specifications you identify this is the second 9 10 paragraph here, other specifications in the 11 middle, that it has a gas drying system of 12 recirculating ovens? 13 Α. Yes. 14 0. And that's the recirculating dryer 15 that we have been discussing in this case? 16 Α. I believe that might be part of it. 17 I am not completely sure, only because I do know 18 when we hooked up the oxidizer that there were 19 modifications made to press 5 to hook it into the 20 oxidizer. 21 Q. So you didn't return press 5 to its 22 original condition? 23 Α. No. 24 0. So at this point in time you are not

¹ sure that press 5, the recirculating dryer, would ² continue to function as it did prior to being ³ hooked up to the oxidizer?

A. I don't believe it would.
Q. Do you have an opinion about whether
or not at this point you believe it would control
7 VOCs?

8 Α. Based upon the modifications that 9 were made, I don't believe it would have the same 10 effect on consuming some of the VOCs. When we 11 hooked up the oxidizer, one of the things that 12 allows the regenerative thermal oxidizer to run 13 efficiently is the fact that it needs air that is 14 solvent-laden and any unnecessary consumption or 15 reduction of the solvent content in the air would 16 reduce the efficiency of the oxidizer, causing it 17 to use more natural gas.

Q. Okay. So your opinion is that in its prior construction, the recirculating dryer would have operated as a control?

A. In its prior construction --

22 Q. Prior construction.

A. It would have -- based on my
 knowledge, would have consumed some of the VOC

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content in the effort of creating heat for
 operating the system.

3 0. Some of the VOC content, but 4 specifically you are saying enough of the VOC 5 content that it would function as a control device that would pass Illinois' regulations for control? 6 7 Α. I can't speak to that. The only 8 thing I can say is that I know it was -- that Rich 9 performed an informal stack test that indicated it 10 consumed, you know, a fair amount of VOC. 11 Q. Okay. I would like to ask you about 12 your decision not to perform a test -- not to 13 perform a formal test. What I understand is that 14 there is -- an informal test was done in 2001, and 15 that date is in the record, and that in December 16 of 2002, you moved all of your operations from 17 press 4 to press 5 and that if your expert is 18 correct, it would have only cost you \$11,180 at 19 that time to perform a test on press 5 to make certain that it was a control device compliant 20 21 with the Illinois regulations?

A. I believe so, yes.

Q. So in December of 2002, even though
you were running all of your solvent-based

Page 84 printing production on the one press, Packaging 1 2 did not think it was important at that time to run 3 a formal compliance test to make sure that that 4 press was compliant? 5 Α. We were considering prior to 2002 6 the purchase of an eight-color press. None of our 7 presses were capable of producing eight colors, 8 and at that time, the intention was to have a 9 grand compliance plan to -- to go to a thermal 10 oxidizer, as well as permitting a new press, and 11 we bundled those activities together. 12 Ο. But that press didn't come on-line 13 until 2004, right? 14 I believe 2004, yes. Α. So that's a pretty big gap where you 15 0. 16 have a press running all of your solvent-based 17 printing with a very open question about 18 compliance? 19 We were operating based upon the Α. 20 advice that we were given. 21 Q. And in 2004 when you installed press 22 6, Packaging created a permanent total enclosure 23 for the facility; is that true? 24 Α. Yes, it is.

Page 85 1 Ο. And what I understand from the 2 estimates from Mr. McClure is that part of the 3 cost of running a formal compliance test would be 4 to create a temporary total enclosure? 5 Α. Yes. 6 But that if you have a permanent 0. total enclosure, that portion of the test is 7 8 essentially moot? 9 Α. Correct. 10 0. So in 2004 when you created the 11 permanent total enclosure, it would have only cost you \$6,180, give or take for inflation, to perform 12 13 a formal compliance test on press 5 at that time? 14 Α. That sounds right. 15 Q. So you could have tested it prior to 16 ducting it to the oxidizer? 17 Α. Correct. 18 Q. Don't you think that would have been 19 a simpler way of resolving this issue related to 20 press 5? 21 Α. Hindsight, yes. We were following what we thought was sound advice as the best way 22 23 to approach the situation we were in. 24 But Packaging did not make a Q.

Page 86 1 decision to test press 5 before hooking it up to 2 the oxidizer? 3 Α. No. 4 Even though in that year your gross 0. profits were significant, as we will talk about in 5 6 just a minute? 7 Again, frankly, I didn't realize Α. 8 that the -- what we refer to now as the informal stack test wasn't a good enough test. We had done 9 10 a test, and based on my understanding at that 11 point in time, you know, we had done everything we 12 were supposed to do, and we were moving forward in 13 the process of trying to meet the State's 14 expectations and grow our business. In hindsight, 15 everything would have been easier. 16 Ο. So in 2004 -- strike that. 17 Mr. Imburgia, you did 18 participate in the meetings with Illinois EPA following the violation notice that you received? 19 20 Α. I participated I recall in at least 21 one meeting with the EPA down in Springfield. 22 0. And at the time that we filed this 23 lawsuit, you would have been aware that a lawsuit 24 had been filed against Packaging Personified?

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1	A. Oh, yes, absolutely.
2	Q. So you were aware at least to some
3	extent that the State and the Illinois EPA were
4	not satisfied with the informal test?
5	A. I can't say that. Honestly, I
6	thought that the years in question were the years
7	we have operated without a permit, and that was
8	the majority of issue.
9	MS. SANGHA: I would like to move
10	Complainant's Exhibit 16 into evidence, the ad
11	advertising press number 5.
12	HEARING OFFICER HALLORAN: Okay.
13	Wasn't this already in evidence in the older
14	MS. SANGHA: It wasn't. Chris just
15	reminded me.
16	HEARING OFFICER HALLORAN: All
17	right. Where did we leave off from the last
18	hearing in 2009?
19	MR. GRANT: 14.
20	MS. SANGHA: 14.
21	HEARING OFFICER HALLORAN: 14.
22	MR. GRANT: For Complainant.
23	HEARING OFFICER HALLORAN: Okay.
24	Mr. Harsch, any objection?

Page 88 1 MR. HARSCH: No. 2 HEARING OFFICER HALLORAN: 3 Complainant's Exhibit No. 16 is admitted. 4 (Whereupon, COMPLAINANT'S 5 Exhibit No. 16 was admitted 6 into evidence.) 7 MS. SANGHA: Now, as we discussed earlier, I am going to let Chris ask some 8 9 questions about the tax documents. 10 MR. GRANT: It's confidential. 11 HEARING OFFICER HALLORAN: A]] 12 right. At this point, I am going to ask that the 13 court reporter indicate confidential in the 14 transcript, and I am going to close the door and 15 put a sign out for the public stating that this is 16 a closed session and there will be a sign-up 17 sheet, if need be. 18 (Whereupon, a discussion was had 19 off the record.) 20 (Whereupon, confidential 21 proceedings were had and are 22 contained in a separately bound 23 transcript marked 24 confidential.)

Page 135 1 HEARING OFFICER HALLORAN: We are 2 back. It's approximately 1:16, May 21st 3 continuing this hearing. I want to note for the 4 record that we are done, I believe, with the 5 non-disclosable tax return confidential testimony. I took the sign off of the door. So the public 6 7 are welcome again, but there is no one here except 8 for the actual parties and the witnesses and the 9 attorneys. 10 With that said, Mr. Imburgia --11 THE WITNESS: Imburgia. 12 HEARING OFFICER HALLORAN: -- is 13 still on the stand and is still under oath. 14 MR. HARSCH: On cross-examination 15 there were questions raised. I will have you look 16 at --17 HEARING OFFICER HALLORAN: 18 Mr. Harsch, if you can hold on a minute. 19 Kari, I think we are on a new 20 transcript. We are back on the old one? 21 THE COURT REPORTER: Yes. 22 HEARING OFFICER HALLORAN: We are 23 not on a separate one? 24 THE COURT REPORTER: Right.

i i Page 136 1 FURTHER REDIRECT EXAMINATION 2 BY MR. HARSCH: 3 If you will look in the book, 0. 4 Respondent's Exhibit 12. 5 Α. Yes. 6 Ο. The date of that letter is 7 December 16th, 2002, and looking at the table 8 that's attached to that letter, do you have an 9 opinion as to whether that's a full year or a 10 partial year of 2002? 11 I would say it's a partial year. Α. 12 0. And have you looked at your 13 production records versus what's listed here? 14 Α. Yes. 15 And compared that to what's listed 0. 16 here? 17 Α. Yes. In production pounds it 18 appears to be approximately half. 19 MR. GRANT: Can you tell us what 20 exhibit you are looking at, just so we know? 21 THE WITNESS: I am looking at 22 exhibit -- Respondent's Exhibit 12, and it's the 23 table on the last page and comparing it to 24 Exhibit 60.

Page 137 1 MR. GRANT: 60, thank you. 2 BY MR. HARSCH: 3 There is no date of this attachment 0. 4 to the letter, is there? 5 Α. No, there is not. 6 This letter also -- or this Q. 7 attachment also references production in feet. Is that -- how does the -- how do these records 8 9 relate to what you subsequently found in terms of 10 reliability of the production in feet? 11 Α. Unfortunately, I do not have footage 12 records from prior to 2005, because the footage 13 records were deemed to be less reliable. 14 Q. And that was by the environmental --15 the person you hired to manage your environmental 16 affairs internally? 17 Α. Correct. 18 Ο. Tim Piper? 19 Α. Correct, Tim Piper. 20 0. I think he previously testified in 21 this case. 22 Α. Yes, he did. 23 Q. And did he go back through all of 24 your records and try to reorganize them all?

Page 138 1 Α. Yes, he did. He streamlined our 2 compliance recordkeeping. 3 0. The Complainant's Exhibit 21, which 4 is not in the book, it's the April 30th, 2004 5 I believe you have it up there. letter. 6 Α. Complainant's exhibit what number? 7 It's the letter to the Agency. 0. 21. 8 Α. Yes. Yes, I do. 9 Do we have this one? MS. SANGHA: 10 MR. HARSCH: Your Exhibit 21. 11 BY MR. HARSCH: 12 This would have been on data -- this 0. was prior to the time that Tim Piper had joined 13 14 you, correct? 15 Α. Correct. 16 Q. The data that you used -- your 17 production data that you testified to that you used to prepare Exhibit 59, was that data after 18 19 Tim Piper had gone to work for you and gone back 20 through and changed your -- all your reporting? 21 Α. Yes, it was. 22 Ο. Would that explain the difference 23 between the two documents? 24 Α. I believe it could explain the

¹ difference.

2	Q. At the time that you were in
3	negotiating to buy press 5 there was absolutely no
4	discussion regarding the ability of press 5 to
5	comply with environmental regulations?
6	A. No, there was not.
7	Q. Did you under did you understand
8	that press 5 by the person selling it to you
9	absolutely destroyed some solvents by the
10	recirculation to produce the heat?
11	A. Yes. That's how it was sold to us
12	is that in the process of recirculating, that
13	there would be some consumption of the solvents in
14	the air to generate heat to heat the process.
15	Q. And that's what you subsequently
16	relayed to Mr. Trzupek, your consultant?
17	A. Yes. I did relay that to
18	Mr. Trzupek.
19	Q. And I think you previously testified
20	that press 5 was energy efficient because of this
21	recirculation of the heated air to the dryer plus
22	the consumption of the solvent in as a result
23	of the recirculating portion?
24	A. Yes, I did.

Page 140 1 Does press 6 operate in the same Q. 2 manner? 3 Press 6 recirculates heat, but there Α. 4 was never a claim by the manufacturer when we 5 purchased that piece of equipment that it would actually burn any solvent, just that it would 6 7 recirculate some heat. 8 0. And you knew from day 1 that it 9 would require a control device to comply with the 10 regulations? 11 Α. Yes. 12 And the same is true with press 7? 0. 13 Α. Yes. 14 Q. As of December of 2003 or the 15 February of 2004 timeframe, was -- were you aware 16 that the Illinois Environmental Protection Agency did not accept the -- what we have been referring 17 to as the informal stack test? 18 19 Α. No, I did not. 20 MR. HARSCH: I have no further 21 redirect. 22 HEARING OFFICER HALLORAN: Any 23 further questions? 24 MR. HARSCH: No further redirect.

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1	HEARING OFFICER HALLORAN: Thank
2	you.
3	FURTHER RECROSS-EXAMINATION
4	BY MS. SANGHA:
5	Q. Just a couple questions.
6	Mr. Imburgia, from this chart
7	it's my understanding that you no longer have
8	records for production in footage for the years
9	1999 to 2002 in your records?
10	A. Correct.
11	Q. But in 2002 when this letter was
12	produced you had the records available to you from
13	1999 to 2002?
14	A. Yes. We did have records.
15	Although, it was determined at some point in time
16	that those records were not the most accurate
17	records that we had kept at that point in time.
18	Q. But you have no new records other
19	than this is what I am asking, I guess.
20	The records that were created at
21	that time and kept, you may have retained those
22	records, but you don't have the new records from
23	that those years?
24	A. No. We do not have new records.

Page 142 1 The method of collecting footage and how it was 2 used to measure efficiency was not the most 3 disciplined effort in our facility, and it came at 4 some point in time where we decided that those 5 numbers were not very trusted numbers, and we 6 changed our method of collecting that data in 2005 7 to get more reliable information. 8 But you couldn't go back in time and Q. 9 get new data with the years that had already 10 passed? 11 Α. No. 12 Ο. So the data that you have for those 13 years, that's the best available data that you 14have? 15 Α. It's the only data that --Yes. 16 0. It's the only data that's available? 17 Α. It's the only data that exists. 18 Although, it's accepted to be less than reliable. 19 We use that information to measure shift 20 performance and evaluate, you know, people's 21 performance and progress, and it was determined 22 that because of that reason that it was not always 23 collected as effectively or faithfully as it was 24 supposed to, and that's why we have subsequently

Page 143 1 eliminated that data. 2 MS. SANGHA: No further questions. 3 HEARING OFFICER HALLORAN: Thank 4 you, Ms. Sangha. 5 Mr. Harsch, any redirect? 6 MR. HARSCH: No sir. 7 HEARING OFFICER HALLORAN: Thank 8 you. You may step down. 9 THE WITNESS: Thank you very much. 10 HEARING OFFICER HALLORAN: Thank 11 you. 12 THE WITNESS: Am I supposed to take 13 this with me, or is this for the next person? 14 HEARING OFFICER HALLORAN: You can 15 leave it up there. 16 If you will raise your right 17 hand, the court reporter will swear you in. 18 (Whereupon, the witness was duly 19 sworn.) 20 RICHARD TRZUPEK, having been first duly sworn, was examined and 21 22 testified as follows: 23 DIRECT EXAMINATION 24 BY MR. HARSCH:

 $\frac{i}{j}$ Page 144 1 Mr. Trzupek, would you please state 0. 2 your full name for the record? 3 Α. Richard Trzupek. 4 Q. And where are you presently 5 employed? 6 I am employed as a principal Α. 7 consultant for Trinity Consultants, Inc., in 8 Oakbrook Terrace, Illinois. 9 Q. And what are your -- briefly, what 10 are your areas of expertise? 11 I specialize in air quality issues Α. 12 related to environmental regulation, including 13 permitting, recordkeeping, reporting, litigation 14 support and stack test management. 15 And when did you leave -- when did 0. 16 you join Trinity? 17 Α. May 7th of 2012. 18 I previously marked and it should be Q. 19 60 -- Respondent's Exhibit 62. I think it's in front of you there. 20 21 Α. Yes, I have it. 22 0. That should be marked Respondent's 23 Exhibit 62. 24 Α. Yes, it is.

Page 145 1 Did you prepare this document? 0. 2 Α. I did. 3 And can you explain what it is? 0. 4 Α. It's a supplemental expert report 5 on -- that speaks to a view on control efficiency, emission test costs and the utilization of press 6 7 number 5. 8 And attached to the report is Q. 9 Appendix A. What is that document? 10 Α. My curriculum vitae, as up to date 11 as it is. 12 Q. And is this document true and 13 accurate, to the best of your knowledge and 14 belief? 15 Α. Yes, it is. 16 MR. HARSCH: Before we go forward, I would -- do you have a problem if we enter it? 17 18 MR. GRANT: No. I have no 19 objection. 20 MR. HARSCH: I'd move it then. 21 HEARING OFFICER HALLORAN: 22 Respondent's Exhibit No. 62 is admitted. 23 24

Page 146 1 (Whereupon, RESPONDENT'S Exhibit 2 No. 62 was admitted into 3 evidence.) 4 MR. GRANT: Also, we would ask -- we 5 have the identical exhibit as Complainant's Exhibit 20 -- I'm sorry -- 19. It should be the 6 7 same thing. It's the one we filed before. So we 8 would like to admit that one also. 9 HEARING OFFICER HALLORAN: Is it 10 from the prior case? 11 MR. GRANT: No. It's the -- 19 12 is -- let's see. It was one that was filed with 13 the Board on 5/13 of 2013 as part of --14 HEARING OFFICER HALLORAN: 15 Complainant's Exhibit No. 19 is admitted without 16 objection. 17 (Whereupon, COMPLAINANT'S 18 Exhibit No. 19 was admitted 19 into evidence.) 20 HEARING OFFICER HALLORAN: Is it the 21 same CV, supplemental --22 MR. GRANT: Yeah. Both of them were taken right off the -- right off the website. 23 24 It looks to me to be identical.

Page 147 1 MR. HARSCH: I haven't checked it 2 word-for-word, but I believe it's the same 3 document. 4 MR. GRANT: It was from his hearing 5 report, prehearing report. 6 HEARING OFFICER HALLORAN: So no 7 objection? 8 MR. HARSCH: Yeah, it looks like 9 it's the same copy as the prehearing. 10 HEARING OFFICER HALLORAN: Without 11 objection, Complainant's Exhibit No. 19 is admitted. It's the same document as Respondent's 12 13 Exhibit 62. 14 You may proceed, Mr. Harsch. 15 BY MR. HARSCH: 16 0. Mr. Trzupek, have you read the Board's questions that are contained in the Board 17 18 Order granting the motion for reconsideration? 19 I have. Α. 20 And those are the questions that the 0. Hearing Officer read off this morning? 21 22 Α. Yes. 23 The first question is, did the press Q. 5 tunnel dryer system constitute a capture system 24

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and control device under 35 Illinois Admin Code Section 218.401(c)? You are familiar with that question?

A. I am.

4

⁵ Q. And do you have an opinion as to the ⁶ answer to that or response to that question?

7 MR. GRANT: I am going to ask that 8 before he answers the question I want to point out 9 that this report does not contain any opinion 10 about control. This is what was disclosed. Ι 11 think it probably was in his 2009 report, but his 12 opinion would have to -- what he testifies to 13 would have to be in conformance with 2009. Unless 14 I am wrong, but there is nothing in this opinion 15 report that says this press complied with the rule 16 or 60 percent control or capture or anything like 17 that.

18 BY THE WITNESS:

A. And Mr. Grant, and it says beginning in number 2, as noted in my original expert report, press number 5 prior to its ducting as a new -- to a new control system was equipped with a recirculating drying oven that acted as a control device by oxidizing the VOM contained in the --

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1 MR. GRANT: Yes. It's not in 2 compliance with the rule. That's my point. My 3 point is -- and I just want to clarify. And I 4 know I have used up my quota of objections, but in the 2009 report I believe Joe actually said, in my 5 6 opinion this controlled -- whatever the word is --7 capture and destruction efficiencies are. This 8 doesn't have anything in here. It discusses 9 things in general. It looks like a supplement, 10 but it's not a new opinion. There is nothing in 11 the opinion that says this is controlled. 12 BY THE WITNESS: 13 Α. I believe Mr. Harsch's guestion was 14 whether it was a capture or control device 15 non-compliant with the rule. 16 HEARING OFFICER HALLORAN: T'm 17 sorry, Mr. Trzupek. Mr. Harsch? 18 MR. HARSCH: We submitted a 19 supplemental report. It references his prior 20 report. He is a witness in this case. It's in 21 the record in this case. 22 MR. GRANT: My point is only his 23 that opinion is a 2009 opinion. This is 24 supplementing it, because it doesn't -- there is

Page 150 nothing in this opinion that says that this met 1 the control -- the capture and control devices of 2 3 218.401. It just doesn't. There is no new 4 information in here about that, and there is some 5 stuff in here that could potentially bolster that 6 previous opinion, but the opinion that you are 7 talking about is the 2009 opinion. 8 MR. HARSCH: I just asked him if he 9 had an opinion. 10 HEARING OFFICER HALLORAN: All 11 right. The objection is overruled. You may 12 proceed with Mr. Trzupek. 13 BY MR. HARSCH: 14 Ο. What's your understanding of the requirements, if you have one, of Section 35 Ill. 15 16 Admin. Code Section 218.401(c) as it would apply 17 to press 5? 18 Α. It requires the use of a capture 19 system and control device, and then it goes on to specify what the efficiency -- the capture 20 21 efficiency and the destruction efficiency of those 22 control devices are. 23 So if I understand your 24 question, the first thing is -- the Board asks is,

Page 151 1 does press number 5 qualify as a capture system 2 and control device and my answer to that would be, 3 yes, as defined in -- both are defined terms in 35 4 IAC 211. It specifies what a capture system is 5 and what a control device is. There is also --6 afterburner is a defined term as well, and my 7 opinion is that the press number 5 recirculating 8 oven meets all those definitions. 9 MR. GRANT: Just for the record, I am going to object to this as an undisclosed 10 11 opinion, because it's not in the report. 12 HEARING OFFICER HALLORAN: All 13 right. That's your second objection. That's the 14 same thing. 15 MR. GRANT: I mean, you can overrule 16 it. That's fine. I just want to make it clear 17 that -- because I am going to point it out. It 18 must be in the 2009 report, so --19 HEARING OFFICER HALLORAN: Great. Objection noted and overruled. You may proceed. 20 21 BY MR. HARSCH: 22 What is the purpose of -- as you Q. 23 would understand it, to install a -- require that 24 a capture system and a control device be installed

on an air pollution source?

1

2 Α. The purpose of the capture system is 3 to collect the gaseous air pollution and duct it to a control device. The purpose of the control 4 5 device is to remove the air pollutant or 6 pollutants from that stream, either by destroying 7 them or by collecting them in some manner. 8 HEARING OFFICER HALLORAN: You know, 9 I would like to say to support my ruling -- and 10 I'm not sure exactly what you meant, Mr. Grant, 11 when you filed your prehearing memorandum, but I 12 am looking at page 2, and under witnesses, 13 complainant suggests that the parties agree to a 14broad scope of examination so that all testimony 15 may be heard during the complainant's 16 cross-examination, and --17 MR. GRANT: No. I -- actually, I 18 don't -- the -- I just noticed this, I don't know, 19 a day or so ago, that this report doesn't -- I'm 20 not trying to exclude his testimony. I understand 21 what he testified to in 2009 and what he will 22 testify to today. It's -- what I -- I want to 23 know where -- which expert report it is, you know. 24 HEARING OFFICER HALLORAN:

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Page 153 1 Understood. And I ask the Board to take note of 2 that. 3 MR. GRANT: Sure. BY MR. HARSCH: 4 5 You were told by -- did Mr. Imburgia Ο. 6 tell you anything about the -- what he had been 7 told about the operation of how the 8 recirculating oven would function on press 5? 9 Α. I was. Joe -- and my discussion was 10 that press 5 -- press 5's tunnel dryer was a 11 recirculating type, and that specifically it recirculated the south portion of the exhaust and 12 13 used it as combustion air on the -- for the 14 burners that heated the dryer, and that type of recirculation would destroy some or all of the VOC 15 16 contained in the air. 17 0. Do you understand -- do you know if 18 it was possible to operate press 5 without 19 operating in that recirculating mode? 20 Α. Well, my understanding is it's not 21 So reconfigured I think it was, but as it now. 22 stood in 2002, I don't believe it was possible to 23 operate without that recirculation. 24 The -- you filled out the permit Q.

Page 154 applications that -- with respect to the 1 2 application for the title 5 permit? 3 Α. Correct. 4 Which would be --0. 5 HEARING OFFICER HALLORAN: Is your 6 mike on, Mr. Harsch? I know you are at a 7 disadvantage. 8 BY MR. HARSCH: 9 -- which would be the CAAPP 0. 10 application that you submitted --11 THE COURT REPORTER: Which 12 application? I'm sorry. 13 BY MR. HARSCH: 14 0. And the --15 HEARING OFFICER HALLORAN: 16 Mr. Harsch, she did hear the --17 THE COURT REPORTER: What kind of 18 application? 19 BY MR. HARSCH: 20 Ο. CAAPP, C-A-A-P-P, and I believe that's Complainant Exhibit 9 in this proceeding; 21 22 is that correct? 23 MR. GRANT: That is correct. 24
1, 1, Page 155 1 BY MR. HARSCH: 2 0. You prepared this application? 3 Α. That is correct. 4 Ο. And there are references in here 5 that Mr. Imburgia was asked about this morning 6 where you listed manufacturer's guarantee. Is 7 that correct? 8 Α. That is correct. 9 0. And what were you referring to when 10 you filled out that application? 11 Α. I was referring to the fact that it 12 had a recirculating oven that used the 13 recirculation for combustion air. 14 Ο. Had you conducted the engineering 15 stack test calculation? 16 Α. I did. 17 Ο. Prior to this application? 18 That is correct. Α. 19 And I would ask you to look at -- it Q. 20 would be their Bates stamp number page 370 of that exhibit. 21 22 Α. I'm sorry. The number again? 23 EPA 0370. It would be at Section Q. 24 4.2-7 of the application lettering.

Page 156 1 Α. Yes, I have it. 2 In the middle of the page, Q. 3 efficiency determination, what did you mark down 4 there for capture? 5 For capture, it's -- I marked Α. 6 manufacturer's guarantee. 7 And what would be the -- what Ο. 8 would -- what was your understanding of that at 9 What were you referring to? that time? 10 Α. Well, when you are filling out the 11 permit applications, and especially one like this 12 where we are trying to get them into compliance 13 and into the system as soon as possible, a manufacturer's guarantee for people in my business 14 15 and for people in the permit section is shorthand for, this is what we believe the performance to be 16 17 based on design. 18 0. And that would be referring to the design of the -- how the oven functioned that --19 20 to capture emissions? 21 Α. Correct. 22 0. And what did you fill out for 23 control efficient? 24 Same, manufacturer's guarantee. Α.

Page 157 1 Q. And what were you referring to 2 there? 3 Α. Again, based on the design, we believed that the design would meet their 4 5 requirements of the rule. 6 And for overall, what did you mark 0. 7 down? 8 Α. Engineer's calculation. 9 0. And what were you referring to 10 there? 11 The actual tests that we had done to Α. 12 determine the overall. 13 0. Is the use of the recirculating oven -- recirculating oven of press 5 unique to 1415 Packaging? 16 Α. It is not. 17 And what's your understanding of how 0. common they are in the industry for flexographic 18 19 printing? 20 Α. I have seen them at other 21 flexographic and lithographic printers. Ι couldn't put a percentage on it, but if it's not a 22 23 majority of people that use recirculating ovens, 24 then, you know, it's a significant fraction, I

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1 guess I would say.

Q. Why would the purchase of a
recirculating oven on a press such as press 5 be
important to someone?

A. I think primarily because of the energy savings, because you need a certain amount of energy to run the tunnel dryer, and if you can get some of that energy back from the solvent that you are drying, it's going to be less natural gases.

Q. If I understand you correctly, you would, what, first bring the oven up to temperature with natural gas and then start drying?

A. That's my understanding, but I - I'm not an expert in press operations.

Q. Can you explain what the informal --I know you went into it in great detail at a prior hearing, but can you essentially explain -- well, put it this way.

What is entailed in doing a formal stack test?

A. It depends on what you are doing the
test for.

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Q. Stack testing -- had they done a formal stack test on press 4 -- press 5. Excuse me.

4 Then typically the State Α. Press 5. would require demonstration of both capture and 5 6 VOM destruction. The capture methodology would be 7 most likely using a temporary total enclosure, in 8 this case if a permanent total enclosure were not 9 built, and that would be -- the 204 series methods 10 would be used to prove that.

The measurement of destruction would entail methods 1 through 4 and method 25(a), both conducted at three, one-hour runs at the inlet and the outlet of the control device.

Q. And normally you would give the prior notification required to the agency?

A. Yeah. There is a 30-day written notification that's required, and then a five-day usually phone call verification to give the agency an opportunity to witness the test.

Q. And who is the person that observes
most of the stack tests currently in this area?
A. Kevin Mattison.

Q. And if needed, Mr. Mattison -- has

Page 160 he been available to waive some of those stack 1 2 test notification dates? 3 My understanding is he can, yeah. Α. 4 How did the -- how did the informal Q. 5 stack test that you performed at Packaging differ 6 from a formal stack test? 7 Α. It utilized methods 1, 2, 3, and 8 25(a) at the inlet and outlet of the control 9 device. So starting with the destruction portion, 10 there was no method 4, which is the moisture 11 The moisture method is used to correct method. 12 the air flow from wet to dry in standard cubic 13 feet. It adds a considerable expense, and in this 14 case we could approximate the moisture very 15 easily. We approximated 3 percent, which is going 16 to be very close to the actual, and for the 17 purposes of an informal test, I didn't deem it 18 necessary. We did not do three one-hour runs. We 19 tested for approximately an hour. 20 And again, the nature of the method -- of method 25(a) is you get a continuous 21 22 readout of the concentration of hydrocarbons in 23 the gas stream. So typically when you are doing 24 this kind of diagnostic work, using an instrument,

Page 161 1 you see how consistent your data is. If your data 2 is very consistent over an hour, you essentially 3 get a flat-line readout at an operating condition, 4 as a chemist, as somebody who has been stack 5 testing for a long time, that's sufficient to show 6 that that's a representative concentration, rather 7 than repeating it three times. 8 Those would be the biggest 9 differences on the destruction side, not doing 10 method 4 and not doing three, one-hour runs. The 11 calibrations were the same as would be used in a 12 formal test. The equipment was the same as would 13 be used in a formal test. 14 On the capture side, capture 15 using the temporary total enclosure method is 16 intrusive, expensive, lengthy, and again, for 17 purposes of doing some engineering work, we 18 typically wouldn't do a temporary total enclosure 19 unless the client was looking for a high degree of 20 accuracy. 21 What we did was what's referred 22 to as a liquid-gas mass balance where we determine the amount of VOM being inputted into the system 23 24 by measuring ink use, and more significantly,

Page 162 1 solvent use and adding the solvent to the 2 percentage of VOM in the ink. 3 So you get the amount of VOM 4 that was inputted into the system, and then 5 estimating the amount that was captured using the 6 method 25(a) technique at the inlet to the -- in 7 this case to the recirculating oven. Comparing 8 those numbers gives you a reasonable estimate of 9 what the capture is, and for reasons I will go 10 into if you want, in this case it would be a 11 reasonably conservative estimate, that the actual 12 capture would actually be higher. 13 What were the results of your test? Ο. 14 Α. I would have to look at the document 15 again. And -- okay. 16 HEARING OFFICER HALLORAN: I'm 17 sorry. Which document is it? 18 THE WITNESS: I'm sorry. It is 19 Complainant's Exhibit 8. 20 HEARING OFFICER HALLORAN: Okay. 21 Thank you. 22 BY THE WITNESS: 23 Α. So we found a capture of 24 82.6 percent, a destruction of 93.6 percent and

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¹ overall control of 77.3 percent.

2 BY MR. HARSCH:

³ Q. What are the requirements in the ⁴ regulation?

A. The destruction requirement is at least 90 percent. I would have to look at the rule. My memory says the capture is either 60 or 65 percent in the rule.

⁹ Q. And then the overall would be the ¹⁰ multiple of those two?

A. Correct.

Q. What was the result of the stack test results, the informal results? Do you have an opinion as to whether it demonstrated or did not demonstrate compliance?

A. My opinion is it demonstrated
 compliance, absolutely.

Q. Did you notify Packaging of that?
A. Yes, I did.

Q. From that point forward, did you use those engineering stack test results in all of the permit applications and correspondence that was submitted on behalf of Packaging that you prepared?

Page 164 1 Α. Yes, I did. 2 Ο. And that would have included the 3 subsequent annual emissions reports? 4 Α. That is correct. 5 0. Would that have included the 6 application for the ERMS program, et cetera, 7 that's in the record? 8 Α. The ERMS reports, yes, that is 9 correct. 10 0. And that would have -- would the 11 ERMS fees that were -- do you know if the agency, 12 in fact, came back and requested fees by Packaging 13 for the ERMS program? 14 My understanding is they did, yes. Α. 15 Would those have been based on your 0. 16 results of your engineering calculation? 17 Α. Yes, they would. 18 Do you have an opinion as to whether 0. 19 or not had a formal stack test been performed on 20 press 5, that it would have successfully shown 21 that press 5 complied? 22 Α. Yes, I believe it would have. 23 How many personal stack tests have Q. 24 you performed?

/ / Page 165 1 Α. Hundreds. 2 And how many of those stack tests 0. 3 have been observed by agency personnel? 4 Α. Oh, I don't know. I would say 5 probably -- witnessed tests, maybe one out of every four is typically witnessed. 6 7 Q. And does that include tests 8 performed in Illinois? 9 Α. Yes. 10 Ο. Who has observed your tests here in 11 Illinois? 12 When I started, it was -- as a stack Α. 13 tester, Fred Smith and George Klumera (phonetic) doing the witnessing, and then probably about 14 15 eight years in when I was still stack testing 16 Kevin Mattison took over and still performs that 17 duty. 18 Q. Has the agency ever objected to any -- the manner in which you performed any stack 19 20 tests? Not to my knowledge. 21 Α. 22 Q. Do you have an estimate of what the 23 costs would have been to perform a formal stack 24 testing of press 5?

Page 166 1 Α. The -- the destruction portion, 2 depending on who they used at the time would have 3 been somewhere around 5 to 8,000. The capture portion would have been anywhere from 15 to 4 5 30,000. 6 Q. And those are set forth in your 7 later supplemental opinion, correct? 8 Α. Yes. 9 Q. The cost of the stack test for construction efficiency for both presses 5 and 6 10 for the RCO was slightly over \$6,000; is that 11 12 correct? 13 That's my understanding, yes. Α. 14 Q. Have you read the comments that have 15 been provided on your -- by Mr. Mattison to the 16 Attorney General's Office? 17 Α. I have. 18 Do you have a -- do you agree with 0. 19 those comments? 20 Α. I do not. 21 Q. And why? 22 Well, I guess I should go one by Α. 23 And I am looking at Complainant's one. 24 Exhibit 15.

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The first comment refers to the fact that I used a liquid-gas mass balance, and it does not comply with USEPA Guidance Document 035. And then it goes on to say that the method lacks statistical analysis, cannot be verified and is unreliable.

7 As a chemist and as a stack 8 tester, I disagree with that statement. I think 9 an FID is a well-established tool for measuring 10 hydrocarbons. We know what type of bias the FID 11 has and what type of errors, positive or negative, 12 could be introduced in doing them with the gas 13 mass balance, the magnitude of them, and based on 14 all of my experience and my professional knowledge 15 as a scientist, I would say it is sufficient to 16 absolutely show compliance not in -- not in 17 accordance with Guidance Document 035, but in 18 accordance with sound science, and I think it 19 would also meet the standard of credible evidence 20 that's established in the Clean Air Act Amendments 21 of 1990.

Q. And is there another point you don't
agree with?
A. In B Mr. Mattison assumes that

Page 168 1 the -- states that my listing of the VOM input 2 rate of 40 pounds an hour is incorrect and further 3 assumes that that is actually an ink input rate. 4 That is not correct. 5 The 40 pounds an hour of VOM 6 that is listed in the report is a -- is an 7 accurate listing of the amount of VOM going into 8 the system, not the amount of ink. It was 9 calculated by measuring the amount of solvent. 10 And I think it's worth noting that in flexographic 11 printing you use approximately two pounds of 12 solvent, which is 100 percent VOM for every pound 13 of ink, and then adding to it the VOM portion of 14 the ink that was used. The VOM portion of ink 15 that was used was determined by looking at the manufacturer's safety data sheets for the inks, 16 17 which has a listing of the VOM content, and that's 18 how we have arrived at the 40 pounds an hour. 19 In C, Mr. Mattison notes 20 correctly that the ink usage was measured as VOM 21 whereas the measured inlet concentration is 22 measured as propane, and that is correct. And he 23 also correctly says that because those parameters 24 are different, the assess ment won't be accurate.

Page 169 1 And that is correct, however, as 2 I stated in -- earlier, the assessment will -- we 3 know that the bias will be on the conservative 4 side. Which is to say, we will underestimate the 5 amount of VOM captured. The reasoning that we 6 could say it's an underestimate requires me to go through a bit of chemistry. Would you like me to 7 8 do that? 9 Q. Yes, sir. 10 Α. When -- a flame ionization detector 11 you can think of as a carbon counter. It creates 12 carbon anions, A-N-I-O-N-S, which react, which 13 cause a deflection in the magnetic field, which is 14 That deflection is proportional to the detector. 15 the amount of carbon anions that are created. 16 When you introduce other --17 other atomic species like oxygen or chlorine, that 18 deflection can be -- can be a little bit 19 different. It can be different based on the 20 molecular structure as well. Anything that causes 21 the deflection from a 1 to 1 to a less than a 1 to 22 1 is called response factor. Response factors are 23 somewhat dependant on the type of instrument used, 24 the specific FID, but we know with pretty good

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reliability from published response factors how given compounds will deviate from that 1 to 1 structure.

4 In this case, the type of 5 compounds that Packaging uses deviate very little 6 from that 1 to 1 response. The other way in which 7 this comparison is skewed is that when you assume 8 everything is propane, you are basing your mass rate, your -- in pounds that you calculate based 9 10 on the molecular weight of propane, and 11 specifically on the ratio between the carbon 12 weight to the molecular weight of that compound. 13 In reality, what Packaging uses 14 are a couple of acetates in significant 15 quantities, which has oxygen. So their carbon 16 weight to molecular weight ratio is actually higher than that of propane. So the weight, if we 17 18 had calculated it as acetate, we would have shown 19 more -- a greater capture number. 20 So when I say we are 21 underestimating, we are underestimating on two 22 We are not applying -- we are not taking counts. the response factor credit, and we are not taking 23 24 the molecular weight credit, that both would have

Page 171 1 put the capture number -- would have made the 2 capture number higher. 3 0. Again, that was a measure -- in your stack test, the capture efficiency was 82 percent? 4 5 Α. Correct. 6 0. Do you have any other disagreements? 7 Α. The -- Mr. Mattison correctly says, 8 the inlet flow rate is reported over two and a 9 half times higher than the outlet flow. That is 10 correct, and that is because the difference 11 between those flows is what is in the 12 recirculation loop. We are measuring the inlet, 13 and the recirculation loop only takes a portion of 14the gas flow and allows it to exhaust to 15 atmosphere. The majority of the gas flow is 16 actually in the loop as it goes back around to be 17 recirculated. 18 So there is that difference, but 19 that's not inconsistent with the recirculating 20 oven, nor would it make the measurement of 21 negative pressure incorrect. The pressure was 22 absolutely negative. I measured it, and the --23 empirically, you know the -- you know very well on 24 a flexographic press if it's out of balance and

Page 172 1 you have positive pressure because the room will 2 reek of solvent in moments, and I have never 3 been -- when press 5 was running, I was never 4 there when you got a whiff of solvent off of press 5 5, and so it was absolutely in the negative 6 pressure. 7 0. Do you have an opinion as to whether 8 or not the procedures you used were acceptable 9 procedures by other stack testers? 10 Α. It's very typical of what other --11 what I have seen at every stack testing company I 12 have worked with when you are doing what we 13 consider diagnostic work, trying to size a control 14device or determine an emission factor. It's, you 15 know, precisely the kind of evidence that -- the 16 kind of test that had --17 THE COURT REPORTER: I'm sorry? 18 BY THE WITNESS: 19 Α. I'm sorry. It's precisely the kind 20 of test that had it shown non-compliance, I have 21 seen, you know, other states use a diagnostic test 22 as evidence of non-compliance. 23 BY MR. HARSCH: 24 Q. Are you aware of any instance where

/ ; Page 173 this type of stack test is -- has been determined 1 2 to be non-credible? 3 Α. I am not. 4 0. Would there have been any -- what 5 would have been the cost of doing a -- a formal 6 stack test in 1995 versus 2005, for example, or 7 2004? Would there have been a significant -- any 8 savings, the costs go down? 9 Α. The difference over those ten years might be -- I would guess maybe \$1,000. 10 11 Q. And would the same apply to 12 constructing a temporary total enclosure? 13 Α. Yeah. I would say it would be the 14 same. 15 Are your estimates actually on your 0. experience having done tests over that time 16 17 period? 18 Α. Yes. 19 0. Did you form an opinion and express 20 it as to the ability of press 5 to handle the production of press 4 going back to the initiation 21 22 of the rule? 23 I did. Α. 24 0. Would you explain that opinion and

1 what it's based on?

2	A. Well, it's based on data that was
3	provided to me by Packaging on VOM usage and gross
4	sales, and that's, you know, again, comparing 2002
5	to 2003, and seeing that in 2003 when press 5 was
6	operating, the VOM usage was was significantly
7	higher and gross sales were significantly higher,
8	which both to me seemed to be indicators that
9	press 5 could have handled all of press 4.
10	I think empirically, too, you
11	know, from the times that I would be at the
12	facility, when 5 was operating at you know,
13	it's it never was operating all the time.
14	Every time I did a site visit there would be it
15	might be down for setup. It might be down for
16	maintenance. It might be running. It might be
17	waiting for a job. So empirically, you know, just
18	my observations of the operation were in line with
19	what the data seemed to suggest.
20	Q. Packaging maintained records
21	throughout this time period on VOM purchases?
22	A. Which time period are you referring?
23	Q. 1995 forward.
24	A. Yes. My understanding is they did,

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Page 175 1 yes. 2 Q. And those are the records that you 3 have looked at even recently and still exist? 4 Yes. Α. 5 MR. GRANT: I am going to object to the use of this testimony. I'm sorry. We were 6 7 advised in responses to interrogatories they had 8 absolutely no records during this period. If they 9 are going to use this now --10 HEARING OFFICER HALLORAN: I'm 11 sorry, but you are going to need to speak up. 12 MR. GRANT: We were -- in responses 13 to interrogatories, Packaging advised us they had 14 absolutely no records related to hours of 15 operation or production or anything for this 16 period. So if he is going to use this evidence, 17 we think it should be excluded. 18 MR. HARSCH: Mr. Grant, I have made 19 available to you the actual purchase records for 20 this time period. 21 MR. GRANT: Well, you showed me some 22 invoices for purchases of ink and solvent. 23 MR. HARSCH: That's what I am 24 talking about.

1 Page 176 1 MR. GRANT: I withdraw my objection. 2 I withdraw my objection for the time being. 3 MR. HARSCH: At this point in time, I have no further direct questions. 4 5 HEARING OFFICER HALLORAN: Thank 6 Whose witness? Mr. Grant? you. 7 CROSS-EXAMINATION 8 BY MR. GRANT: 9 Hi, Mr. Trzupek. I wanted to Q. 10 discuss general -- your general involvement with Packaging Personified. It's my understanding you 11 12 came to them in 2001? 13 Α. That's correct. 14 0. Do you have any personal knowledge 15 of their operations from 1995 until the time that 16 you came? The summer of 2001 I think is the date 17 that's in the record. 18 Α. I'm not sure what you mean by 19 personal knowledge of their operations. 20 0. I just wanted to get a feeling for 21 did you know that Packaging Personified was 22 operating? 23 Α. I did. 24 0. Okay. And did you have any personal

1

Page 177 knowledge of the hours of operation of presses 5 1 2 and 6 from March 15th, 1995, until December of 3 2001 when you came there? 4 I had no direct knowledge of that, Α. 5 no. 6 0. Okay. All your knowledge about the 7 utilization of these two presses during that 8 period came from Packaging, didn't it? 9 With the exception of, you know, my Α. 10 observation of the ink records, which would be my 11 own, my knowledge of the utilization would have 12 come from Packaging. 13 0. Now, the ink records that you are 14 talking about, those are copies of invoices from 15 ink manufacturers and copies of invoices from 16 solvent -- from vendors of solvents, solvent 17 distributors, that sort of thing? 18 Α. That's correct. 19 0. Was there anything else? Was there 20 any tabulation, any calculation of hours, any 21 records of the hours of operation of press 5 or 22 press 4 during this period? 23 Α. From Packaging, you mean? 24 0. Yeah. Something besides the

Page 178 1 invoices for the -- you know, from manufacturers 2 and solvent vendors, was there anything else? 3 Α. No. I don't believe there's any 4 tabulation. 5 And you don't have any -- well, I Ο. 6 shouldn't ask this as a leading -- do you have any 7 knowledge of their sales during the period from 8 March 15th, 1995 to December of 2001? 9 Α. I was provided sales data, yes. 10 0. And when was that provided? 11 Α. That, I can't tell you when that was 12 provided. It would have -- because it was into 13 this document. It would have been sometime before 14 I prepared this supplemental report. 15 0. Okay. So in -- let's see. What was 16 your exhibit number? 17 Α. I think it's 62. 18 I am going to use -- rather than use Q. 19 two, they are identical; so 62. 20 So let's see. On page 4 of 4, 21 of 62, for that purpose? 22 Α. Correct. 23 Q. Okay. And that -- was that -- would 24 that have been within the last 12 months?

Page 179 1 Α. Well, I think it would have to be 2 before that. Well, yeah, probably. 3 Ο. I mean, when you --4 Α. Yeah. 5 When you got it? Ο. 6 Α. Roughly, yeah. 7 0. All right. Okay. How about the --8 how about the knowledge of their financial 9 results, and I am not about to open up that 10 confidential docket again at this point. 11 But you were sitting here when 12 all that stuff was coming in, right? Prior to 13 that, prior to today, did you have any knowledge 14 of the profitability or the profits, gross 15 profits, any of those numbers? 16 Α. No, sir. 17 0. Okay. And other things I was 18 thinking of was knowledge of lead times for 19 Packaging customers. Do you have -- did you have 20 any understanding of that? 21 Well, for that industry in general, Α. 22 my impression has always been it's a rather guick 23 turnaround, a quick turnaround market, but I don't 24 know the actual lead times.

Page 180 1 The reason I am saying this is, as Q. 2 you know, I mean, they did operate with presses 4 3 and 5 until one year in 2003 where, for whatever 4 reason, you know, they were compelled to shut it 5 down or chose to shut it down when they were 6 operating with two. One of the things that 7 operating with two presses is -- and Ms. Sangha 8 got into it is your ability to handle rush orders 9 and to handle the flexibility in production. 10 Do you have -- what was your 11 level of knowledge for that period of 1995 to 12 2001? 13 Α. I wouldn't have any level of 14 knowledge. 15 0. Okay. When did you advise Packaging 16 that they were -- that press 4 was noncompliant? 17 When I looked at their ink and Α. 18 solvent use records. 19 Okay. Would it have been -- and off 0. 20 the top of my head, I am thinking it was 21 December 9th, and it may not have been. Oh, yes, 22 the day you did the stack test -- we have got a 23 date there. Okay. December 12th, 2001. 24 Α. It would have been before that.

Page 181 1 0. Okay. You would have advised them 2 that press 4 was not in compliance before that 3 date? 4 Α. Yes. 5 Okay. Okay. Let's go to Exhibit 0. 6 No. 12. That's Complainant's Exhibit No. 12. 7 Α. I have it. 8 0. Okay. If you can -- let's see. Ιf 9 you could go to -- okay. Respondent's Exhibit 12. 10 Α. Respondent's exhibit --11 0. Sorry. 12 Α. That's okay. 13 0. Okay. All right. Look at the table that's on -- I think it's page 4 of this exhibit. 14 15 Α. Yes, I have it. 16 Ο. Did you produce this table? 17 Α. You know what? That's a very good I think I did, but it's long enough 18 question. 19 that I can't say that with certainty. It looks 20 like the way I would have done an Excel table at 21 that time. 22 Q. Okay. And, you know, what we had 23 discussed before with them was the utilization of 24 press 4 and press 5 that's reported here. You see

Page 182 that in the production of feet we are using on it. 1 2 I mean, based on these numbers, during 2002 press 3 number 4 was a major part of their solvent 4 printing production. Would you agree with that? 5 Α. If this production represents solvent printing, yeah, I would agree with that. 6 7 Q. Well, presses 4 and 5 are the 8 solvent printing, right? 9 Α. Presses 4 and 5 both do solvent 10 printing. I -- press 4, again, at some point was 11 also used for rewind, and I don't know when that 12 was. 13 0. Okay. Just one second. 14Mr. Hearing Officer, I have what 15 has been marked as Complainant's Exhibit 22, if I 16 may approach? 17 Can you identify this document? 18 Α. This appears to be an annual 19 emission report for the year -- reporting year of 20 2002. 21 Okay. And your name is at the Q. 22 bottom. Did you prepare this report? 23 Α. I believe I did. 24 Can you turn to the section -- I Q.

Page 183 1 will find it if I can -- the section that reports 2 VOM emissions for press number 4? 3 Α. That would be page 6 of the --4 actually, page 7 is where the emissions are, yeah. 5 0. All right. As far as pages 6 and 7, 6 the emission rate, does this exhibit indicate that 7 press number 4 was actually running and doing 8 solvent during 2002? 9 Α. It does. 10 0. And just real quickly to tie it up, 11 do you have Complainant's 21, the annual emission 12 report for the previous one? 13 And if you look at Complainant's 14 Exhibit 21, which is in evidence -- do you have a 15 copy of it? That's a 2004 annual emission report. 16 MR. HARSCH: I think it's loose. 17 BY THE WITNESS: 18 Oh, yeah, okay. I have it. I have Α. 19 it, yep. 20 BY MR. GRANT: 21 Q. And if you can again turn to press 22 number 4 emissions. 23 Α. Yes. 24 Q. And it doesn't list any emissions,

Page 184 1 does it? 2 Α. That is correct. 3 0. Does that suggest that press number 4 4 was used as a printer in 2002, but was maybe a 5 rewinder or something in 2003? 6 Α. My -- I mean, it definitely did not 7 operate in 2003. And 2004 -- or I'm sorry --2002, yeah, it definitely did some printing. 8 9 Q. Okay. 10 Α. If I can expand on that? 11 Q. Sure. And on page 6, if you look at the 12 Α. 13 column then --14 Which one? 0. 15 Α. Page 6 in the 2002. 16 0. Okay. 17 Α. PWR is the process weight rate, and 18 you will see the pounds per hour, which would be 19 the amount of ink consumed for 4 was deemed to 20 average 14.99. If you look at page 8, the PWR for 21 press 5 was 34.97. So that's probably the best indicator of the relative utilization of those 22 23 presses that year. 24 HEARING OFFICER HALLORAN:

Page 185 1 Mr. Trzupek, is that Complainant's Exhibit 23 or 2 21? 3 He is looking at 22. MR. GRANT: 4 HEARING OFFICER HALLORAN: Thank 5 you. 6 BY MR. GRANT: 7 Ο. And where did you get the information for this pounds per hour calculation? 8 9 Α. That would have come from Packaging. 10 0. Okay. Mr. Trzupek, I was going to 11 ask you some questions about the CAAPP permit 12 application, but Ms. Sangha advised or did a lot 13 of that with Joe and Mr. Harsch has done some on 14 the CAAPP permit application as it is. 15 I just want to ask you, did you 16 hear Mr. Imburgia's testimony? 17 Α. I did. 18 Q. And do you agree with it? Part? 19 All right. Well, let me see if 20 I can do this without the document. You mentioned 21 that a manufacturer's guarantee is a term of 22 art -- this is my interpretation of it, a term of art that's used in what is meant to communicate as 23 24 based on your best knowledge or something like

	Page 186
1	that; is that
2	A. That's the way we usually do it in a
3	permit application, yeah.
4	Q. And I don't know if you remember,
5	but for some reason I do, that in the 2009 hearing
6	that David Bloomberg testified that a
7	manufacturer's guarantee is not acceptable as a
8	compliance demonstration. Do you remember that?
9	A. I don't remember that, but I could
10	well imagine David saying that.
11	Q. Yeah. It's in the record.
12	Is that the position of the
13	agency, that they won't accept the manufacturer's
14	guarantee?
15	A. I don't know.
16	Q. Okay. Do you know why well, if
17	you don't know, then you wouldn't know why you put
18	it in when the agency wouldn't accept it. Is that
19	a fair statement?
20	A. I guess because I have had other
21	permit applications that I have put that language
22	in and then they have been accepted, I wouldn't
23	I didn't hesitate to use it again.
24	Q. Okay. Do you recall which

Page 187 application it was where the agency accepted a 1 2 manufacturer's guarantee? 3 Α. Wow. I am sure I could produce one 4 or two or three or a dozen, but to give you a 5 specific one -- specific one right now, I -- no. 6 I --7 I am thinking big versus small. Ο. In 8 other words, a flexographic printer is a big VOM 9 emitter, and maybe a smaller one is acceptable. 10 Is -- does that suggest anything or --11 Well, yeah, I mean and -- yeah, it's Α. 12 all relative. I think of Packaging as small and I 13 14 0. The operation of a business, you 15 know, a printing press using solvent inks as 16 opposed to -- you know, I don't know. I am 17 thinking of a minor emission point as a refinery 18 or something like that? 19 Α. I think it's some of that. I think 20 it's some of how -- you know, how significant the 21 source is and how -- how many times we have seen 22 it before and how much we can rely on it. You 23 know, for something like a paint filter, for 24 example, it would be common for a coater to use a

Page 188 paint filter, and it would be common for, you 1 2 know, me to say that that paint filter is guaranteed to be 99 percent effective, 3 4 manufacturer's guarantee, in removing solids, and 5 that's what we would list, and, you know, I don't think I've ever done a paint booth where that's 6 7 not been okay. So stuff like that. 8 0. Okay. We are going to have to go to 9 Exhibit 9, Complainant's Exhibit 9, this CAAPP 10 permit. 11 Α. Okay. Got it. 12 Q. Okay. Now, there was a lot of 13 information in this application that was provided 14 to you by Packaging I'm sure. You wouldn't have 15 to audit all the records personally to perform a 16 CAAPP application, would you? 17 Α. No. 18 0. And I believe in your deposition one 19 of the things you relied upon was the 20 manufacturer's guarantee portion that the VOM 21 control portion was provided to you by Packaging; 22 is that correct? 23 Α. Yeah. As far as that there was the 24 existence of a recirculating oven that would

Page 189 1 destroy VOCs. 2 Okay. Can you turn to IEPA 0364 Ο. 3 Bates stamp? 4 MR. HARSCH: I'm sorry. What's the 5 number? 6 BY MR. GRANT: 7 0364 in Exhibit 9. 0. 8 Α. Okay. Got it. 9 Q. Okay. The internal thermal oxidizer identified in there, Mr. Imburgia said that was 10 the recirculating dryer, correct? 11 12 Α. Yes. 13 Q. And you agree that's what that 14 refers to? 15 Α. Yes. 16 Aside from that, there was no Ο. 17 internal thermal oxidizer in there? 18 Α. You mean like an additional? 19 0. Yeah. 20 No. There was not an additional, Α. 21 no. 22 Ο. If you can turn to 03 -- 3067 -- or 23 0367. Okay. I want to ask about -- specifically about the 90 percent figure in there and where 24

Page 190 that number came from, because that's pretty 1 2 specific. Was that provided to you by Packaging, 3 or was it -- how was it determined? 4 Α. It depends on the date. 5 0. This one is June 9th of 2002. 6 Α. And when did we perform the test? 7 Ο. December 12th, 2011 (sic). 8 Okay. So typically when we are Α. 9 doing a -- when we are doing the application, 10 unless there is some other reason, we claim the 11 destruction rate that the rule provides. So 12 90 percent is what the rule provided. We had done 13 the test that showed we were over 90. So that's 14 why we would have listed 90. 15 0. So that is in there from your 2001 16 test from the --17 Α. A combination of the test and the 18 rule, and the rule requirements, yeah. 19 0. Is Mr. Imburgia -- I am talking 20 about Joe Imburgia. Is he qualified to do stack 21 testing himself? 22 Α. Not to my knowledge. 23 Q. Okay. And are you aware of any 24 tests that he might have performed on his own
Page 191 outside of your informal stack test? 1 2 Α. I am not. 3 All right. Let's turn to Exhibit 8. 0. 4 It's the report on your informal stack test. 5 Α. Okay. 6 And some of this maybe I got from Q. 7 Mr. Harsch, but I didn't look yet. The VOM input 8 is listed -- I am on page 2 -- at 40 pounds per 9 hour? 10 Α. Yes. 11 And how did you come up with that 40 Q. 12 number? 13 Α. We measured the amount of solvent 14 used directly. We weighed it. We weighed the 15 amount of ink used, and then we took the VOM percentage of the ink and added it to the weight 16 17 of the solvent used. 18 0. So if it was like 70 percent 19 solvent, then it would be -- the amount of -- the 20 VOM input number in there would have been eight 21 times 7.7 equals 40 pounds; is that correct? 22 Α. In flexographic printing, No. 23 again, you use -- you have solvent that you use 24 for viscosity adjustment, depending on the

Page 192 conditions of the day, and you use about two 1 2 pounds of straight solvent for every pound of ink 3 roughly. So this 40 pounds, two-thirds of that 4 number would have been -- what's two-thirds of 40? 5 You don't have to do the math if --Ο. 6 So say there is -- so 30 pounds of Α. 7 this is -- roughly is going to be straight 8 solvent --9 Q. Right. 10 Α. -- weight, 30 pounds. There is 30 11 pounds of VOM input, and then you have maybe 20 pounds of ink that's 50 percent VOM. So that's 12 13 another 10. 14 Q. Okay. So this is the VOM content? 15 Α. Total. 16 Q. Not -- okay. 17 Α. Correct. 18 Q. You agree that the test did not 19 fully meet the requirements of 218.401, don't you? 20 Α. I do. I do. 21 Q. And to perform the test you needed 22 to find an inlet and outlet point to measure? 23 Α. That is correct. 24 Q. And that wasn't chosen by you, but

Page 1/93 1 rather Packaging showed you an appropriate place? 2 Α. Correct. One of their -- as I 3 recall, it was one of their maintenance people who 4 pointed me to the ducts, the inlet and the outlet 5 ducts. 6 Q. Okay. This is sort of going over 7 the same ground. As far as the fact that the 8 recirculating oven on press 5 operated, say, from 9 March 15th, 1995, to the present, that came 10 directly from Packaging, right? 11 Α. That's correct, yes. 12 0. You were talking about these 13 recirculating oven flexographic printers. Τ 14 guess, first of all, I will ask -- I mean, 15 flexographic printers all have a drying system of 16 some sort, don't they? 17 Α. In general. There are exceptions, 18 but, yeah, in general they do. 19 And I think before the purpose was 0. 20 so that you are running at a speed where you are 21 not worried about smearing the inks, right? 22 Α. That is correct. 23 Q. Is that what it's for? And also, I 24 think you were here when Mr. Imburgia testified to

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the drying system on press number 6. I think he said there was a recirculating drying system, not necessarily exactly the same as 5. That was my impression of it. Do you have knowledge of press 6's system?

A. I don't have personal knowledge. My understanding from talking to Mr. Imburgia is that it recirculates hot air, but it doesn't use it as combustion air, whereas in 5, it used the recirculated air as combustion air.

Q. Okay. One of the issues in this case is that Packaging is claiming it didn't need to install an RTO for press number 5. But, in fact, did install a press -- an RTO for press number 5, correct?

A. It installed it. I think actually
with -- the impetus was the installation of press
number 6.

Q. That was when it was installed, and it was kind of my understanding to that period, but if press number 5 had a system that could control and press number 6 had a recirculating oven, what was the purpose of the RTO? A. To control press -- I mean,

Page 195 1 primarily to control press number 6, because, 2 again, my understanding of 6 is that it 3 recirculates warm air, but it doesn't use it as 4 combustion air. If it's not using it as 5 combustion air, it's not going to get into the 6 flame front and it's not going to be destroyed. 7 So 6 has to have an RTO. 8 Ο. Okay. That's based on his testimony 9 today you are saying? Because you said you had no 10 personal knowledge of press 6. 11 Α. I don't. And this is just from 12 previous discussions with Joe and the guys at 13 Packaging. 14 0. Okay. Which then leads to the question of Packaging did, in fact, go and buy a 15 16 \$250,000 RTO and has been running and feeding gas 17 into it, all that kind of stuff. Why would it 18 have bought an RTO for three presses when they 19 only have two and they have one --20 MR. HARSCH: I'd object to the question. He had ample opportunity to ask that 21 22 question to Packaging when they were on the stand. 23 HEARING OFFICER HALLORAN: 24 Overruled. He may answer if he is able.

1 BY MR. HARSCH:

2 Why would Packaging have bought the Ο. 3 RTO sized for three presses when you only had two, 4 and the one press did not need to be controlled? 5 Well, I -- buying it for three Α. 6 presses, I would imagine, would be for in case 7 they expanded, and like any business, they want to be ready for expansion, I suppose, but again, 8 9 that's just my speculation. 10 I would not think that they 11 would want to run one press controlled by the 12 oxidizer and another press with a different 13 control system. I would think that they would 14 have done it for simplicity to duct them both to 15 the oxidizer they were buying anyway. The 16 operating press wouldn't be any different. Well, wouldn't the gas cost be 17 0. 18 higher for a larger RTO? 19 Α. No. I mean, with the gas -- kind of 20 gas stream you have in flexo, it's pretty much 21 they run self-sustained anyway. I mean, once the 22 oxidizer is up to temp, you are pretty much just 23 running the gas on pilot and the solvent is 24 providing all the heat you need to run it.

1 1

Page 197 1 Ο. The technical information provided 2 for the presses and the permit applications has a 3 BTU per hour rating? 4 Α. It does. 5 Ο. Okay. 6 That is the rating. Α. 7 Q. Are you saying it's not using it? 8 Α. Correct. 9 0. Okay. In your opinion report -- let 10 If you look under number 2 -- and me get it out. 11 this is Respondent's Exhibit 62, and State's 12 Exhibit 20 or 19 -- strike that. 13 In the middle of the second 14 paragraph there is a sentence that I am familiar 15 with both flexographic presses in general, and 16 flexos that are equipped with recirculating ovens in particular, and have been at several printing 17 18 facilities equipped with one or the other or both. 19 Do you see that? 20 Α. I do. 21 Okay. So which facilities have you 0. 22 been to that have these ovens? 23 I don't know what they are calling Α. 24 themselves these days, but there are several what

Page 198 1 used to be treasure chest advertising, and I just 2 don't remember what they are called these days, 3 but they are a big nationwide printer, and they 4 have several of them. QuadGraphics had some. Ι 5 have seen some at RR Donnelley's facilities. 6 The -- the printers -- and this Ο. 7 was -- there was a lot of this in the 2009 hearing 8 that you -- where you did the adjustment standard 9 petition for Bema -- Bema Systems and Vonco or --10 Α. Very good. You win the cigar, yep. 11 0. Really? 12 Α. That's it. 13 Q. I'm amazed I remember that. 14 How about for those places? 15 Α. Vonco, no. Bema, no. I don't know 16 about Formel. 17 Okay. Let's go to your report, page 0. 18 It's actually page 3 of 4 at the bottom. 3. At the bottom of -- this is subsection 2. 19 It's on 20 page 3. You mention Method 85 (sic), 2s and 25(a) 21 as a determination of capture efficiency and you 22 state, these tests have routinely been accepted by 23 state and federal authorities, including the 24 Illinois Environmental Protection Agency. That's

Page 199 1 correct? 2 Α. Yeah. Except there is a typo there 3 that I had not noticed before. It should be 18, 4 25 and 25(a). 5 0. Because that didn't look right to me 6 either. 7 MR. HARSCH: Excuse me. I didn't catch the typo correction. 8 9 MR. GRANT: Do you see the second paragraph -- or the third paragraph on page 3 of 10 11 4? 2S becomes 25. 12 MR. HARSCH: Mr. Hearing Officer, would you please -- if we could mark the 13 14 correction on it? 15 HEARING OFFICER HALLORAN: Mine is 16 marked. 17 BY MR. GRANT: 18 Q. All right. Now, which of these methods did you use in the informal stack test? 19 20 Α. 25(a). 21 Okay. Is 25(a) the one that had the 0. 22 three hours? 23 Α. Three, one-hour runs, correct. 24 Q. But you didn't do three. You did

Page 200 1 You said 25(a) was not done in its entirety, one. 2 correct? 3 Α. Yeah. It was not a -- it was not a 4 formal test. It was not done. 5 Ο. Okay. When you say these tests have 6 been -- routinely been accepted by State and 7 federal authorities and now let's get into -- kind 8 of more into your informal stack test, when has --9 because without going into a lot of details, there 10 were -- like Methods 1 through 4 you didn't do 4. 11 You didn't do the three-hour test. 12 When has Illinois EPA accepted 13 that sort of partial test? 14 Α. In enforcement situations. 15 Q. And what I am looking for -- because 16 this is what your opinion is -- is to demonstrate 17 compliance with the rule, because that's what the 18 issue before us is, right, could it have met 19 218.401 control efficiencies? 20 For the purpose of demonstrating 21 compliance, not gaining an estimate over what may 22 need to be done in the future or for sizing for 23 control or anything like that, when has Illinois 24 EPA ever accepted a partial compliance test to

Page 201 1 demonstrate compliance with the rule? 2 I don't know if they have or have Α. 3 not. 4 Is this the first time? Q. 5 Α. The first time what? 6 0. Is this the first time that you have 7 ever attempted to prove compliance with a rule 8 without following the procedure? And I am talking 9 about VOM emissions. We might as well stay there. 10 Α. I guess I would have a little 11 trouble with the structure of the question, 12 because what I was attempting to do was to 13 determine whether that could have met the capture 14 and destruction requirements. And it absolutely 15 did. 16 It wasn't a formal stack test. 17 We have admitted that. As a scientist can I say 18 with certainty, with technical certainty, that 19 that met more than 90 percent destruction and more 20 than 65 percent capture? I can. I understand 21 that it's not formal, and I understand that EPA would want a formal compliance test to demonstrate 22 23 compliance, but did that unit meet the numbers? 24 Yes, it did.

Page 202 1 All right. The reason that Illinois 0. 2 EPA would want a formal stack test is because 3 that's the minimum reliable test, isn't it? 4 I think -- I don't believe that Α. 5 that -- I don't think I would agree with that 6 I don't think it's the minimum statement. 7 allowable. 8 0. Do you think it's overkill? 9 Α. I think it can be, yeah. 10 Q. Do you think it's overkill in this 11 case? And I'm not talking about the whole case. 12 I am talking about not accepting your informal stack test as a -- to demonstrate VOM capture and 13 14 control. 15 Α. I don't know that I would use the word "overkill," but I think that if you are 16 17 interested to know what the actual capture and 18 control numbers are, it's not necessary to do 19 three, one-hours. 20 Ο. Do you think the rule is not 21 technically sound? 22 Α. No. No. I would not agree with 23 that. I think the rule is technically sound. 24 Would you agree that using the Q.

Page 203 1 method that you used to demonstrate compliance with the rule, in this case the informal stack 2 3 test, is a novel method? 4 Α. I think -- novel for demonstrating 5 compliance is what you mean? 6 0. Yeah. I understand that -- you 7 know, there's a reason for you doing what you are 8 doing, but as a method of demonstrating this 9 compliance with 218.401, is this a novel method? 10 Α. Well -- and again, it wasn't 11 intended to be a compliance test. So we are using 12 it as evidence after the fact to determine whether 13 the press was compliant, I don't think that's 14 novel. Using it as -- calling a non-compliance 15 test a compliance test, yeah, that would be novel. 16 So it's not generally accepted to 0. 17 use a partial test to demonstrate compliance with 18 the rules? 19 Α. Yeah. No. I would agree with that. 20 0. Okay. And if it had been -- I think 21 that we have gone through this, but if it had been 22 a formal test, you would have notified Illinois 23 EPA prior to come up with an agreed protocol and 24 allowed them to witness the test; isn't that

	Page 204
1	correct?
2	A. That is all correct.
3	Q. And they weren't notified, because
4	it wasn't intended to be a compliance test?
5	A. That is correct.
6	Q. Okay. We have got a little bit of a
7	disconnect here between your numbers and
8	Mr. McClure's on the PTE, or not necessarily the
9	costs of the PTE I mean, well, there is two
10	that I recall. For one thing, he put an estimate
11	at \$5,000 in for a permanent total enclosure and
12	then 6,000 something for the compliance test
13	itself; whereas, your testimony is 15 to \$30,000
14	for a temporary total enclosure, and then we are
15	also accepting that 6,000 number, correct? Could
16	you explain that?
17	A. So really the difference between
18	Mr. McClure's number for the PTE and my number for
19	the TTE?
20	Q. Yes.
21	A. Yeah. The if you are doing a
22	permanent total enclosure, the test is really a
23	certification of what used to be called procedure
24	T and Kevin can tell you, it's not it's a 204

Page 205 1 now, I believe, but it's a series of measurements 2 that you do one time, measuring the surface area 3 of the room, measuring the diameter of any outlets 4 into or out of the room, and it's a pretty quick 5 procedure that is not very expensive. 6 If you are doing a temporary 7 total enclosure, you actually have to construct 8 the enclosure. A lot of them are made out of 9 two-by-fours and visqueen. 10 So you are building the 11 structure around whatever you are wanting to 12 measure the capture efficiency of, or you are 13 configuring the room in order to do that. And 14 then you are doing three -- I'm sorry. 15 First, you do a baseline run to 16 establish normal conditions. Then, you would do 17 what's called a balancing run to verify that the 18 TTE isn't influencing the test, and then you do 19 three, three-hour tests. So a TTE test is usually 20 a two-day ordeal, and that 15 to 30 includes the 21 construction costs of the TTE and then the fact 22 that you are doing basically two days of 23 continuous testing in order to finish it. 24 Whereas, a PTE is just a one-time certification.

Page 206 1 So installing a permanent total Q. 2 enclosure actually is cheaper then? 3 Well, no. I didn't say that. Α. 4 That's the certification. I -- constructing the 5 permanent total enclosure, actually building, you 6 know, the walls or whatever is necessary, I don't 7 know what those costs are. They -- they had some 8 cost to do that when Packaging did it, but I have 9 no clue what those costs are. 10 So you don't really know, but you 0. 11 accept the fact that he has put the \$5,000 number 12 in his estimate? 13 Α. Yes. I have no personal knowledge. 14 0. Okay. Were you there when they --15 were you present at Packaging when they ran the 16 formal stack test on the control device in 2004? 17 Α. I was. 18 Ο. Were you involved in setting that 19 up? 20 Α. I helped them put together the 21 request for proposal and pick a vender, yes. 22 0. Did they have the permanent total 23 enclosure in place at that time? 24 Α. They did.

/ .5 Page 207 1 Q. And press -- at the time press 5 and 2 press 6 were connected to the RTO, correct? 3 Α. That is correct. 4 Ο. But the stack test was run on the 5 RTO itself, correct? 6 Α. At the inlet and the outlet of the 7 RTO. 8 0. Right. And wouldn't it have been an 9 easy -- comparatively easy thing to stack test 10 press number 5 at that point using a formal 11 compliance test? 12 Α. My understanding -- and again, I 13 don't have direct knowledge of this, but my 14understanding at that point was that 5 had been 15 reconfigured so that it was no longer -- the 16 ducting was no longer recirculating. 17 Couldn't you just go create an inlet 0. 18 or an outlet, whatever you had to do, before it 19 reached the control device and do the testing? 20 Well, if -- but it wouldn't have Α. 21 shown any control if they had disconnected the 22 recirculating ductwork. 23 0. Okay. So this was a situation that 24 was created by Packaging taking the drying oven

Page 208 1 off, I assume? 2 Α. Not the drying oven off. It's the 3 recirculation loop. 4 0. Okay. 5 Α. Yeah. 6 Did you -- well, let's take a look Ο. 7 at it real quick. Can you look at 16? It's a 8 picture of the press. 9 Α. Complainant's 16. Okay. Got it. 10 Now, this is in evidence. And this Q. is -- they are trying to sell the printer, the 11 12 press number 5, and this is the advertising 13 information that they have on it. 14 Α. Yes. 15 Q. And you see they have listed here 16 the recirculating drying oven as one of the 17 features of it? 18 Α. T did. 19 Q. Okay. Is there any reason why --20 and this is one thing -- and I asked Mr. Imburgia 21 about this, too, but is there any reason why since 2001 nobody has every just done a formal stack 22 23 test on number 5? I mean, I understand what's 24 your testimony about once it was removed, et

Page 209 1 cetera, but what would prevent them from doing it 2 right now, or a week ego, even better? I'd look 3 like an idiot. 4 MR. HARSCH: You would object to 5 putting the evidence in. 6 HEARING OFFICER HALLORAN: I'm 7 sorry? 8 MR. HARSCH: He would object to 9 putting the evidence in. 10 BY MR. GRANT: 11 Ο. I don't think I could keep that out. All right. Do you understand what I'm saying? 12 13 Α. Yeah, I do understand what you are 14 saying, and I understand where you are coming 15 from. In my world, the idea of volunteering to do 16 a formal test stack without being requested by the 17 State, I don't know anybody in my side of the 18 aisle who would ever suggest that. 19 I mean, you were here -- well, prior 0. 20 to today, did you get the confidential financial 21 information which I'm not going to use -- but were 22 you exposed to that? 23 Α. No. 24 Q. I mean, as Mr. Imburgia admitted,

Page 210 1 there really was -- there is no financial 2 limitation on performing the test really 3 throughout the relevant period? 4 Α. No, but -- and I understand that. 5 But it's not -- my job as a consultant is not to 6 tell Mr. Imburgia how to -- you know, hey, here is 7 another way you can spend some money. And why 8 don't you have the cop ride with you on the way 9 home, too, so he can make sure you're not 10 speeding. I wouldn't do that. 11 0. There was a lot of -- in 12 Mr. Imburgia's testimony it was -- got to a point 13 where he was basically saying, we took the best advice we could or words to that effect. 14Do you 15 recall? 16 Α. Yes. 17 Did you advise them not to do a Q. 18 formal test on press number 5? 19 I didn't proactively say, don't do Α. 20 it, but I didn't suggest it, and I won't suggest 21 it. 22 Q. Okay. That resulted in what we have 23 right here right now, hasn't it? 24 Α. Well, it's -- I think that would --

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that's one perspective. Another perspective is that we developed very credible evidence that the press was, in fact, in compliance. So in assessing the penalty, why don't we use that credible evidence.

6 0. The Board has already found 7 violation for it. In other words, they have split 8 the baby here and they said, press 5 was in 9 violation because you didn't demonstrate 10 compliance. That's a violation, but let's send 11 these guys back to hearing on the issue of whether 12 it could have complied, ignoring press 4's 13 operation and the benefit. You know what was the 14 bonus for that? That's kind of what we are -- I 15 mean, do you agree that kind's of why -- we're 16 here for that?

¹⁷ A. Yeah.

Q. It would have eliminated that whole issue.

A. And I understand that. And, you know, if I had back in 2002 a magic ball that would have made me do something that would have -that would have said, this is the one thing we can do that would fix this and none of the rest ten

Page 212 1 years would happen, yeah, I would do that. 2 But I guarantee you, Mr. Grant, 3 if I told somebody in my business that I had told 4 a client to voluntarily do a formal stack test, 5 they would think I was nuts. 6 0. Okay. We are getting into the 7 uncomfortable area of this examination, and I'd 8 ask you to turn to Complainant's No. 18. 9 Α. Okay. 10 HEARING OFFICER HALLORAN: All 11 This is regarding the motion in limine? right. 12 MR. GRANT: Yes. 13 HEARING OFFICER HALLORAN: I really 14 haven't ruled on that, because I left it go. 15 Because based on our conversation, Mr. Harsch was 16 going to whittle his down from 100 or so to four, 17 I think he submitted regarding the congressional 18 discussions of Mr. Trzupek? 19 MR. HARSCH: Well, I was hoping 20 against all hope Mr. Grant would not proceed. So 21 I have not marked my documents. I have, as I 22 explained on our status call, the list of 23 documents I intend to move into this and offer, 24 the list of documents that were attached to my

Page 213 motion in limine and the documents from the two 1 times that Mr. Trzupek has testified before 2 3 Congress, and Mr. Grant, as of this morning, had 4 agreed to that. 5 MR. GRANT: Yeah, I have no 6 objection to that. 7 MR. HARSCH: I have taken it down 8 dramatically. 9 HEARING OFFICER HALLORAN: Okay. So 10 you whittled them down to the two times 11 Mr. Trzupek was before Congress? 12 MR. HARSCH: Correct. 13 HEARING OFFICER HALLORAN: A11 14 right. And so we are all in agreement that these 15 motions in limine should be granted and go 16 forward. 17 MR. GRANT: Yes. 18 HEARING OFFICER HALLORAN: A]] 19 The motion in limine filed by both parties right. 20 on May 6 and then with Mr. Harsch supplementing 21 his 100 or so publications and what not to -- go 22 ahead. 23 MR. HARSCH: I would like to make 24 just a real brief statement for the record.

1 1 Page 214 1 HEARING OFFICER HALLORAN: Sure. 2 MR. HARSCH: As I stated in the 3 motion, we can have no objection to the State's 4 use of a book that the witness has written, but we 5 think the witness ought to be judged, his views by 6 the sum of his position, and that's why we have 7 provided that, in reference to the list. As I 8 mentioned during our status conference, I frankly 9 view and still do, probably more so even, this 10 motion as a -- as a slap on myself. 11 HEARING OFFICER HALLORAN: Could you 12 speak up, please? 13 MR. HARSCH: As a slap on me 14 personally for possibly presenting a witness to 15 the Pollution Control Board at a hearing who is 16 not truthful. 17 HEARING OFFICER HALLORAN: T don't 18 think -- I don't know if Mr. Grant is going that 19 way. Do you want to --20 MR. HARSCH: And I just have to take 21 some -- I started my career at the Pollution Control Board in 1973, and it's a long time since 22 23 then, and this is the first time that's ever -- I 24 believe happened. So to that extent, that's -- I

Page 215 would like the Board maybe to hear that. 1 2 HEARING OFFICER HALLORAN: Okay. 3 And they will or at least read it. 4 So the motions in limine are 5 granted, and Mr. Harsch stated that, I guess, he hasn't had an opportunity -- I think -- I can't 6 7 remember if you faxed them to me or e-mailed them 8 to me or delivered them, but I have them here, and 9 I guess Mr. Harsch will mark them when the time 10 comes. 11 MR. HARSCH: I have them here. 12 HEARING OFFICER HALLORAN: All 13 right. Proceed, Mr. Grant. 14 BY MR. GRANT: 15 Q. Mr. Trzupek, in 2011 you published a book called, "Regulators Gone Wild: How the EPA 16 17 is Ruining American Industry;" isn't that correct? 18 Α. That is correct. 19 Ο. And it was largely critical of -- it 20 wasn't specific to Illinois, but it was critical 21 of regulators and regulations; isn't that correct? 22 It was -- I think that's too broad a Α. 23 description. It was critical of specific actions 24 by Environmental Protection Agencies.

Page 216 1 Okay. That's fair enough. 0. Ι have -- if you can turn to page 15 -- or 18 if you 2 are not there of Complainant's Exhibit No. 18. 3 4 Α. I'm here. 5 Ο. Okay. And these are exhibits -- or 6 excerpts that I took from this book, which, for 7 the record, I bought on Amazon.com. 8 Α. Thank you. 9 0. You're welcome. 10 And I have done -- made a few 11 changes by redacting a -- there was a number of 12 references to specific settlement numbers in this 13 case, and I have redacted them, because I --14settlement is generally not used as evidence at 15 the case, but I would also like to point out that 16 the amount that the State asked for in civil 17 penalty in its opening brief, which was 800 and 18 some thousand dollars is at the same -- the same 19 general area. So if one number is unreasonable, here's a number that we have in the record that's 20 21 unreasonable, okay? 22 Α. Okay. 23 And in this -- this book you wrote Ο. 24 one chapter on this Packaging Personified case,

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1	correct?
2	A. I did. I did.
3	Q. And I am going to direct you to the
4	first page of my exhibit, and this just and
5	this is for the purpose of introducing the
6	Packaging chapter.
7	So at the bottom of the of
8	the last paragraph at the top of the last
9	paragraph it says, In the chapters that follow, we
10	will examine how environmental regulation and
1 1	regulators in America have extended their reach to
12	virtually every facet of our economy over the last
13	40 years. These invasions have little to do with
14	protecting the environment and much to do with
15	preserving the atmosphere of fear that ensures
16	that everyone with a green job remains employed.
17	Did you write that?
18	A. I did.
19	Q. Okay. And is that your opinion?
20	Not in this case specifically, but is that your
21	view of environmental regulations and regulators?
22	A. The reason I wrote the entire book
23	was because I couldn't say my view in just two
24	sentences. So I think you have to read the whole

Page 218 1 book. My -- my view in general is that there is a 2 I think we -- we don't have to lot of overreach. 3 look any farther than the recent headlines to show 4 that sometimes regulators do get out over their 5 skis a little lit. 6 Ο. Did you read Peggy Noonan's article 7 in the Wall Street Journal? 8 I did not. Α. 9 You should. It's online. Q. 10 And Mr. Trzupek, I know 11 Mr. Harsch is offended by this. The purpose of 12 this is because there were so specific references 13 to Packaging Personified that we do believe that 14 it shows evidence of the bias against the 15 regulations specifically in this case. I'm not 16 saying you don't have a right to an opinion. Ι 17 could tell you right not that -- not including 18 this chapter, there is a couple of lawyers in my 19 office that said, I agree with half of it, so --20 Α. Actually, some of the best 21 compliments I got were from Agency employees. 22 Q. I wouldn't be surprised. 23 Well, let's go to the next page, 24 which is the first page of the chapter that deals

Page 219 1 with this Packaging Personified case, and the 2 title is, "Jobs versus Retribution: The Price of 3 Punishment." Do you know why you chose that term 4 for the chapter? 5 Α. I thought it was descriptive. 6 Ο. Okay. How jobs -- what's the 7 retribution? That's sort of the inflammatory word 8 in there. What does retribution refer to? 9 Α. Well, it -- the penalty demands and 10 not just me, but again, people in my side of the 11 aisle, for a case like this seemed excessive. It 12 seemed that -- you know, beyond the pale of what I 13 have seen in many other cases. 14 Ο. Okay. But most of this issue here 15 has been on the economic benefit of non-compliance 16 when it comes to penalty, would you agree? 17 That's my understanding, yes. Α. 18 And that's kind of what we are here Ο. 19 for right now for this hearing. 20 Α. Right. 21 The Board really just wants to know, Ο. 22 what was the economic benefit of the 23 non-compliance. I understand that the statute 24 requires the Board to assess a penalty that

removes -- or that at least recovers the economic benefit of non-compliance unless it would be unreasonable to do so. I think that's how it's put. You understand that that's in the statute? A. I do.

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Q. So when we are talking about the
overall penalty and the demands and stuff,
wouldn't you agree that most of this is two
different calculations of the economic benefit of
non-compliance?

11 Α. I think that the length that this 12 case has gone on, you know, when you look at the 13 PCB website, I think this is the second oldest 14 case, and I understand that -- economic benefit 15 calculations and how they are done. I also know 16 that frequently in spite of the economic benefit 17 calculation cases are settled relatively quickly 18 for a number that's much less. So it has always seemed odd to me that this one has gone on so 19 20 long.

Q. I don't want to ask about specifics,
because I agree with you. Most of enforcement
cases are settled.

A. They are.

	Page 221
1	Q. We don't do trials every day.
2	A. Right.
3	Q. I don't want to get into specific
4	settlement discussions, but let me just ask you,
5	to what what's your level of knowledge of
6	settlement offers from both sides and the amount
7	of settlement discussions? Do you have any
8	personal knowledge of
9	A. I do not.
10	Q. Okay. I would like you to go to the
11	second page, 42. Down at the bottom you are
12	talking specifically about Packaging Personified
13	and its owners here, and there is this statement,
14	"Given their type of operation and levels of
15	emissions, Imburgia and Muccianti's plant
16	according to Illinois rules should have an
17	incinerator called a thermal oxidizer to destroy
18	emissions from the process." Do you see that?
19	A. I do.
20	Q. That's different from the position
21	that Packaging is taking in this case, or at least
22	for the period of 1995 through 2002?
23	A. I think Packaging is saying that
24	they should have been destroying the emissions on

Page 222 1 press number 4 for that period is my 2 understanding. 3 0. Okay. 4 Α. They are admitting that. 5 But not for press number 5? Ο. 6 Α. That press number 5 was controlled, 7 correct. 8 Ο. And, in fact, you say, the company 9 dutifully complied -- going on to page 43 now --10 spending over a third of a million dollars to 11 collect emission from its presses. And I won't 12 get into the legal fees. Is that the Ship & Shore 13 oxidizer device that they use? 14 Α. The Ship & Shore, the consulting 15 cost, the permanent total enclosure, all of it is 16 estimated to about a third. 17 Q. Yeah. I mean, those numbers are 18 familiar and you have --19 Α. Right. 20 0. -- dealt with them? Okay. 21 Let's get to page 44, and down 22 at the third paragraph, Whatever discretion that 23 Illinois EPA might have otherwise exercised was 24 eliminated by the Illinois administration in its

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1 seemingly insatiable need for cash. Governor Rod 2 Blagojevich was running up billions in debts, et 3 cetera.

> Α. Yes.

4

5 0. Okay. Was that -- that was your 6 belief -- and we are talking specifically about 7 Packaging Personified's case here. As far as the 8 settlement position or the weight issue position 9 of the State, do you really believe that it was 10 tied to financial problems caused by Rod 11 Blagojevich?

12 Α. Well, at the time -- you know, it 13 was well known at the time and you often heard it 14from agency employees how the governor was 15 sweeping the environmental funds. That was a 16 common complaint in Springfield, both on the 17 penalty side and then the fees side, sweeping it 18 and using it for other money and how tight the 19 budgets were. 20 And it was -- all of a sudden we 21 saw in the consulting community Illinois go from 22 one of the states that you could really negotiate 23

24 it flipped to -- to the detriment of the State to

with and was a little more business friendly, and

Page 224 1 one that now has the responsibility -- now has the 2 reputation and on my side as one of the more 3 difficult ones; whereas, Indiana went completely 4 the other way, from one of the more difficult ones 5 to the easier ones. 6 That happened when all this 7 budget stuff was going on. The policy that the agency adopted that if you are a day late on your 8 9 CAAPP application, your CAAPP reapplication, it's \$10,000. No -- you know, no negotiation, happened 10 11 at this time, which is different, again, than most 12 other states, and compounded by the fact that the 13 State has a -- it's own unique little CAAPP 14 reapplication deadline that other states don't 15 have. 16 So when you see those little kind of gotchas coming up that seem intended to 17 18 fund, and you see -- you know, you hear all these complaints about how the Agency is hurting for 19 20 money -- again, I put those dots together and 21 said, maybe that's what's going on. Maybe this is 22 just about the budget. 23 Okay. So essentially this -- the Q. 24 way I read this chapter is Illinois EPA was

Page 225 1 intransigent on the penalty, and the reason was the State's need for cash; is that correct? 2 3 Α. Well, yeah, that's a simplification 4 of it, but I suggested that that might be the 5 reason, yeah. 6 Q. Okay. How about -- well, let me 7 stop there. The Pollution Control Board entered a -- issued a civil penalty of \$456,000 in this 8 9 case. 10 Do you believe that penalty is 11 within the scale of reasonable given their 12 requirement to remove economic benefit of 13 non-compliance? 14 Α. What was the number that they 15 proposed? 16 0. 456,000. What they did is they 17 entered a final order assessing a 456,000 and 18 change civil penalty and then reconsidered it and 19 sent it back. So what we are doing today is to --20 Α. Okay. 21 0. That was the number that was 22 originally -- was originally calculated by the 23 Board. 24 Α. I personally think, Mr. Grant, that

Page 226 1 I think the process itself, that is excessive. 2 and especially in this case, is a huge penalty, 3 and, you know, throwing on another 400 plus 4 thousand on to what Packaging has already had, 5 yeah, I do think that's excessive. 6 Now, just below that you have 0. Okay. 7 a statement that says, "With the governor 8 desperate for every dollar he could get, 9 evenhanded negotiation was no longer an option." I understand -- and it reads very well, by the 10 11 way. 12 Α. Thank you. 13 I think you said you are really --0. 14 you are not familiar with all of the details of 15 back and forth negotiations? 16 Α. No, no. 17 0. Okay. Let's go to page 47, which is 18 the second to last page of this exhibit. 19 Α. Okay. Got it. 20 Q. Going on, I am going to the --21 halfway down the page there is a sentence that 22 says, "This kind of regulatory intransigence 23 and -- and again we are talking about the 24 Packaging Personified case -- bureaucratic
Page 227 1 bungling is the pattern time and time again in 2 state after state across the nation." In that 3 chapter you're characterizing this case? 4 Α. Yes. 5 And Illinois EPA has approached Ο. 6 dealing with Packaging Personified in the case? 7 Α. Yes. 8 And then finally the last page is an 0. 9 acknowledgement section, and in the acknowledgement section you acknowledge -- you 10 11 thank Dominic Imburgia and Phyllis Muccianti 12 personally for their help and that sort of thing? 13 Α. Well, I think, you know, for the 14 record, let's read that whole paragraph. 15 0. Well, I actually would have to go --16 I didn't want to make this thing too big, but I got the book, if you want to see it. 17 18 Α. I have got it right here. 19 Ο. You have that with you? 20 Α. I carry my own around, but I think it's important to have the right context here. 21 22 Q. Yes, I agree. 23 Α. So the paragraph is, "Finally, my 24 profound thanks to the hardworking men and women

Page 228 whom it has been my privilege to serve during my 1 2 primary career as a consultant to the industry. 3 These are not faceless corporate executive who 4 make distant decisions in the boardroom. They are 5 instead, talented, tireless men and women working 6 on the factory floor who use ingenuity and hard 7 work to provide a living for their fellow 8 employees and prosperity for their country. 9 My job is to keep the EPA off of 10 their backs so they continue to do that important 11 work, and it has been an honor to help them. 12 There are too many to call by name, but among 13 those that I am proud to call both client and 14 friend are" -- and then I list a number of clients and Dominic and Phyllis are among them. 15 16 0. Sure. I understand that you have a 17 right to write the book. You have a right to your 18 opinion. My concern is with respect to what you 19 have put in here, that it could bias your opinion 20 that you are giving here today. 21 Α. And Mr. Grant, as a scientist -- and 22 I understand a lawyer is an advocate, and you are

advocating your side, and I understand why you are
doing what you are doing, and I respect that.

Page 229 1 As a scientist, and in particular as a scientist trained by the Jesuits, 2 3 science is sacred, and to suggest that anything 4 about the technical details of my testimony would 5 be affected by my bias or my personal opinions is 6 offensive to me, and absolutely incorrect. Ι 7 would never compromise science. I love science. 8 I love the scientific method, and anything 9 technically I do, I stand behind 100 percent. 10 0. Okay. And just for the record, a 11 lawyer trained by the Jesuits, but only in law 12 school. 13 Α. Loyola? 14Yeah. 0. 15 Α. Me, too. 16 0. Yeah. I think we did that four 17 years ago. 18 Α. I think we did. 19 MR. GRANT: That's it. That's all 20 I've got. 21 HEARING OFFICER HALLORAN: 22 Mr. Grant, I just for the record --23 MR. GRANT: I should move this in as 24 an exhibit.

Page 230 1 HEARING OFFICER HALLORAN: For the 2 record -- I'm sorry, Mr. Grant. For the record, I 3 just want to clarify that the State has redacted 4 portions of this Exhibit 18? 5 MR. GRANT: That's correct. 6 HEARING OFFICER HALLORAN: All 7 right. Okay. Go ahead. 8 MR. GRANT: I would like to move it 9 into evidence. 10 HEARING OFFICER HALLORAN: 11 Mr. Harsch? 12 MR. HARSCH: I have no objection. 13 HEARING OFFICER HALLORAN: 14 Complainant's Exhibit 18 is admitted. 15 (Whereupon, COMPLAINANT'S 16 Exhibit No. 18 was admitted 17 into evidence.) 18 HEARING OFFICER HALLORAN: Before we move on, Complainant's Exhibit 15 in here that Mr. 19 20 Trzupek was using, Mr. Harsch was directing him on, it was Mr. Mattison's letter or something, but 21 22 is this from the 2009 case? 23 MR. GRANT: No. This is -- what this is, is word-for-word our 213(f) disclosures 24

Page 231 1 to Packaging made on November 15th of last year. 2 So rather than prepare an expert report, I just --3 we just copied that into here; so hopefully 4 word-for-word, typos included. This is our 213(f) 5 expert witness disclosure, all the conclusions and 6 opinions. 7 I think Mr. Harsch doesn't want 8 to call it an expert report, but we do want to 9 admit it. He already used it, and it's going to 10 be used for Mr. Mattison's testimony. 11 HEARING OFFICER HALLORAN: Okay. Ι 12 guess for future reference you should put 13 something on here to identify it, instead of 14 people going through the record and saying --15 Well, I didn't know that MR. GRANT: 16 he was going to use it beforehand. I should have 17 figured that we would have used it. 18 HEARING OFFICER HALLORAN: Well, I 19 mean, to put something -- write something on there 20 or type it on. There is no date and --21 MR. GRANT: It's been a busy week. 22 HEARING OFFICER HALLORAN: Well, 23 you've had a lot of time, but I understand. All 24 right. Mr. Harsch, your witness.

	Page 232
1	REDIRECT EXAMINATION
2	BY MR. HARSCH:
3	Q. While you were reading from that
4	book, you didn't read all the acknowledgements,
5	did you?
6	A. I did not.
7	Q. Would you continue to read those
8	acknowledgements, because I am proud of the next
9	couple of sentences.
10	A. From where I left off?
11	Q. Yes.
12	A. There are too many to name, but
13	among those that I am proud to call both client
14	and friend are Ed Kalebich, K-A-L-E-B-I-C-H, and
15	Beau Moran, M-O-R-A-N, at Robbins Community Power;
16	John LaRoi, L-A-R-O-I, at Vonco Products; Dominic
17	Imburgia, Phyllis Muccianti, Joe Imburgia and Tim
18	Piper at Packaging Personified; Bob Schultz at
19	Vision Integrated Graphics; Tom Nicolleto,
20	N-I-C-O-L-L-E-T-O, Ben Nguyen, N-G-U-Y-E-N and
21	Roger Darlan, D-A-R-L-A-N, at DS Containers; Chuck
22	Tyburk and Bill Tyburk at EnGlobal,
23	E-N-G-L-O-B-A-L, and Scott Shaver and Mark Betz at
24	Catalytic Products International.

Page 233 1 These are the kind of people 2 whose efforts have made America a proud and 3 prosperous nation, and it is my sincere prayer 4 that they and their descendants will continue on 5 this path. 6 Ο. Don't you make some other 7 acknowledgements? 8 HEARING OFFICER HALLORAN: I'm 9 sorry, Mr. Harsch. Could you speak into the mike? 10 I'm having trouble. 11 BY MR. HARSCH: 12 I'm sorry. Don't you make some 0. 13 other acknowledgements in the book? 14 Α. I also acknowledge some colleagues 15 including Jim and Linda Huff, Roy Harsch, Renee Cipriano, Kathleen Bassi, Steven Murawski, Nancy 16 17 Rich and Bill Anaya. 18 0. Thank you. 19 Α. You're welcome. 20 I'm honored to be on there. 0. There 21 were questions by Mr. Grant about not having 22 personal knowledge about going back to Packaging's 23 activities prior to 2001 when you were first out 24 there. Do you normally rely on your -- on

¹ information from your clients on their activities, ² past activities of filling out applications, et ³ cetera?

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A. Yes, I do.

4

5 Ο. I think maybe we need to explain it again. Press 5 has essentially -- as it was 6 7 originally installed, if I understand it 8 correctly, if I don't, please correct me, recirculated hot air into the dryer? 9 10 Α. Yeah, but the important point is 11 through -- as combustion.

Q. And then it -- and then it also recirculated part of the exhaust through and into the combustion chamber where the solvent would be combusted?

A. That's correct.

Q. And is it your understanding that that second function is what was removed when it was hooked up to the thermal oxidizer?

A. That is my understanding, yes.
Q. And that's because such an oxidizer
is designed to have solvent-laden airs sent to it?
A. Yeah, the RTO, or regenerative
thermal oxidizer, is extremely thermally

Page 235 efficient, typically around 95 percent thermal 1 2 efficiency. So you -- once it's -- once it's lit, 3 once it's lit off and heated up, it wants solvent-laden air to keep the temperature up, and 4 5 it doesn't really need any gas. It just needs the 6 air stream. 7 0. So it would still -- it still can be 8 a recirculating oven, have a recirculating oven as 9 it presently stands out there and not be 10 configured so that it would recirculate the 11 solvent back through the combustion cycle? 12 Α. Correct, yeah. 13 Ο. I think you testified in response to 14 a question that it was one of the Packaging 15 maintenance people that showed you the ductwork; 16 is that correct? 17 Α. Correct. 18 0. And after he showed you the 19 ductwork, did you then perform any evaluations of 20 those sampling points vis-a-vis the duct turns, et 21 cetera, as required by the rules? 22 Α. Yeah. We made sure they met the 23 requirements of method 1, which generally requires 24 that you have a straight run of at least two and a

Page 236 1 half duct diameters to assure laminar flow, that 2 you can measure properly. 3 So we made sure that it -- that 4 we chose sampling points that were in accordance with method 1 in both cases, and then when I did 5 6 the actual flow measurement, I did a cyclonic flow 7 check to make sure that, indeed, the flow was laminar, and that there wasn't any obstructions 8 9 that would have caused turbulence. 10 So it wasn't Packaging Personified's Q. 11 maintenance person going out and telling you to 12 test right here, test over here? 13 Α. No, not the particular spots. No, 14 no. 15 HEARING OFFICER HALLORAN: 64, and I 16 have got --17 MR. HARSCH: I would just like to 18 mark -- we haven't identified them. So let's 19 change the numbers. Is that easier? However you would prefer I do it. 20 21 HEARING OFFICER HALLORAN: Whatever 22 is easier. 23 MR. HARSCH: What's the last one you 24 have got?

Page 237 1 (Whereupon, RESPONDENT'S Exhibit 2 No. 66 was marked for 3 identification.) 4 BY MR. HARSCH: 5 Showing you a document that we have 0. marked as Respondent's Exhibit 66, it is my notice 6 7 of filing and a response to complainant's motion 8 in limine and cross motion. It had attached to it publications by Richard Trzupek on environmental 9 10 and energy matters. You have seen this list of 11 documents before, right? 12 Α. I have. 13 Ο. And is this basically a pretty good 14 compilation of your recent publications? 15 Α. Yeah. I obviously enjoy writing, 16 and this is a pretty good list. 17 Ο. Does the -- you have written now 18 three books, correct? 19 I have written two, and I am -- I Α. 20 contributed to a third. 21 And how active are you at the 0. 22 Heartland Institute? 23 HEARING OFFICER HALLORAN: Excuse 24 me, Mr. Harsch. I guess I misunderstood. If we

Page 238 1 are going to question Mr. Trzupek --2 MR. HARSCH: It's about the next to 3 last question. 4 HEARING OFFICER HALLORAN: Т 5 can't -- we need publications, and we need copies of these things in your questioning. I stated 6 earlier, basically the only thing you are 7 8 submitting is the Congressional testimony, but if 9 you are referring to this, which I suggested if 10 you were in the conference call and you put in a 11 CV, that would be fine, but I can't -- no. Т 12 can't accept this and continue this guestioning. 13 I have no copies, nothing, and --14 MR. HARSCH: I am simply asking him 15 about the number of his publications. 16 HEARING OFFICER HALLORAN: Well, you 17 are going into the Heartland Center and --18 MR. HARSCH: I'm not going to go 19 into the particulars of it. I just wanted to know 20 what position he did with Heartland. That's all. 21 I have about one more question. 22 HEARING OFFICER HALLORAN: Do you 23 remember me, though, asking if you were going to 24 talk about this at the hearing you need copies of

Page 239 1 this? 2 MR. HARSCH: Yes, and I am providing 3 it -- I have provided copies of the exhibit. 4 That's what I understood. 5 HEARING OFFICER HALLORAN: Of what 6 exhibit? 7 MR. HARSCH: Providing this as a 8 copy as an exhibit, which is what I --9 HEARING OFFICER HALLORAN: You need 10 to do what Mr. Grant did. He supplied part of the 11 book that he was going to question Mr. Trzupek on. 12 You submitted this list the other day, and as I 13 said --14 MR. HARSCH: And I believe I was --15 I understood that I was directed to provide it as 16 an exhibit along with examples of the -- several of the documents, and that's what I have done. 17 18 HEARING OFFICER HALLORAN: Т suggested -- in fact, I directed that we need 19 20 copies of everything we talked about here. 21 MR. HARSCH: I am not presenting 22 them all as --23 HEARING OFFICER HALLORAN: I said it 24 would be great -- it would be acceptable if you

Page 240 1 put all of the publications on his CV, and that's 2 fine. 3 MR. HARSCH: I'm sorry. I did not 4 understand you to that extent. 5 HEARING OFFICER HALLORAN: But, I 6 mean, if you are going to talk about it -- my ears 7 perked up when you said -- you mentioned Heartland 8 and how long have you been with them, and I can't 9 imagine the next question coming out, but you can 10 wrap it up, and you said you have one more 11 question and then you were going to get into the Congressional hearing? 12 13 MR. HARSCH: If you would prefer, Mr. Hearing Officer, I would be happy to ask the 1415 witness if he would include this as -- along with 16 his CV. 17 HEARING OFFICER HALLORAN: Okay. 18 That would be great, and that's what we discussed. 19 MR. HARSCH: I'm sorry. I did not 20 understand that to be the case. 21 HEARING OFFICER HALLORAN: Thank 22 you. 23 BY THE WITNESS: 24 Before you ask, can I correct my Α.

Page 241 1 last answer on how many books have I ever written? 2 BY MR. HARSCH: 3 0. Sure. 4 Α. Three and contributed to four is the 5 correct answer. I'm sorry. 6 Mr. Trzupek, since I prepared this Q. 7 list, it was prepared under my direction, would 8 you have any problem if we added it to your CV? 9 Α. No. I think that would be fine. 10 MR. HARSCH: So with Mr. Grant's 11 leave, we will just appendage to his CV. 12 MR. GRANT: That's fine with me. Ι 13 don't know what --14HEARING OFFICER HALLORAN: This is 15 acceptable? 16 MR. GRANT: As a list of -- I'm not -- you know, I mean, as a list of what he 17 18 wrote attached -- what he has written attached to 19 his publication part of his CV, that's fine. 20 MR. HARSCH: I will provide a 21 revised CV with this attached to it. 22 MR. GRANT: Are we talking about 23 this testimony and slides and stuff like that, 24 too?

Page 242 1 HEARING OFFICER HALLORAN: Well, we 2 are talking about that. He is -- is this the 3 Congressional hearing? 4 MR. HARSCH: And then what I would 5 like to mark then as the remainder of the 6 document, as Exhibit 66, and ask Mr. Trzupek what 7 they are. 8 HEARING OFFICER HALLORAN: If we 9 could hold on a minute, to make this clean, 10 because now this is kind of messed up, for lack of 11 a better word. 12 Mr. Grant and Ms. Sangha, would 13 you just accept this as here so Mr. Harsch would 14not have to attach it to his CV, this whole motion 15 in limine? 16 MR. GRANT: I don't have a problem 17 with it, because it doesn't impact his 18 credibility. This is to restore his credibility. 19 Our stuff was specific to this case, but to 20 generally -- I mean, obviously, you know, we think maybe there is a bias against the Illinois EPA and 21 22 a regulatory thing. To the extent that this, you 23 know, rehabilitates his opinion -- and I don't 24 think it's significant enough for us to argue

Page 243 1 about it. It's Congressional testimony. There 2 are all sorts of environmental --3 HEARING OFFICER HALLORAN: That's 4 fine, yeah. Our only problem was talking about 5 these other publications and --6 MR. GRANT: I don't think he is 7 going to do that. He is not going to put the --8 the text of those publications into evidence. 9 MR. HARSCH: No intention. 10 HEARING OFFICER HALLORAN: So 11 Respondent's Exhibit No. 66 is accepted without 12 objection. 13 (Whereupon, RESPONDENT'S Exhibit 14 No. 66 was admitted into 15 evidence.) 16 BY MR. HARSCH: 17 0. I have one question with respect to 18 the list. 19 And explain what the Heartland 20 Institute is and what your position is there. 21 Α. The Heartland Institute is a 22 conservative think tank that does research and 23 publications on a number of issues, including 24 environmental issues. They asked me if I would be

Page 244 1 a policy advisor in environmental and I said, 2 sure. It's strictly voluntary. I'm not -- I 3 don't get paid for it, and I help them out in framing environmental issues that they wish to 4 5 comment on. 6 Ο. And have you been invited to testify 7 before a Congressional hearing? 8 Α. I have. 9 Q. And what are -- the remainder of 10 Exhibit 66, you provided these to me. What -- can 11 you explain what these are? 12 Α. Sure. I have been asked to testify 13 before the Environment Subcommittee of the Space 14 Science -- I'm sorry. Science, Space and 15 Technology Committee of the House on two 16 occasions; once on June 6th, 2012, and once on 17 February 14th of this year. 18 What you have is a copy of my 19 written testimony, a copy of my oral testimony, 20 and I believe the truth and testimony form that I 21 was required to submit as well. 22 Q. And in general, very shortly, can 23 you explain the positions that you were testifying 24 on?

Page 245 1 Α. Well, we are having what I think is a healthy discussion in the country on the state 2 3 of the environment and where we go with 4 environmental policy from here. I, of course, 5 have a perspective from being on the business 6 side, and one of -- the first thing they asked me 7 to testify was about the cost and benefits of 8 environmental regulation, because USEPA frequently 9 justifies more and more regulation. Even though 10 the world has gotten cleaner and the EPA has 11 always done a great job, we see, you know, 12 regulations being turned out in record numbers for 13 a cleaner and cleaner world. 14And the EPA routinely 15 justifies -- USEPA I am talking about -- this 16 increased regulation based on these incredible 17 savings, that if you add them all up would pay off 18 the national debt. So one of the things they asked me to testify was where do those numbers 19 20 come from, and I talked about where those numbers come from and how to -- just a poor city boy like 21 22 me, they seem a little convoluted at times. 23 They also wanted to talk the 24 second time about what the environment is like,

Page 246 1 how much progress we have made, and how much 2 progress is left to make. And again, that's part 3 of that discussion about it's not 1970 anymore. 4 We have done a lot, and maybe it's time to go into 5 more of a maintenance mode and recognize some of 6 the priorities may have to change a little bit, 7 not to make the environment worse, not to get rid 8 of the EPA, but to recognize the incredible 9 progress that we have made. 10 0. I think this whole question of your 11 credibility is probably sufficiently addressed 12 hopefully. Has your testimony ever been 13 questioned anywhere else? 14 Α. No, sir. 15 Q. That you are biased? 16 Α. No, sir. 17 0. Have you been accused of being 18 biased? 19 Α. I have never been accused of being 20 biased before, no. And if I might just add, you 21 know, like any consultant, anybody who is in my 22 business serving the business community, it's our 23 job to ensure that that our clients are in 24 compliance, but they are in compliance in a way

Page 247 1 that makes sense for their business. And if I 2 could permit -- be permitted to just give one 3 example of what that means. 4 I have one client who in order 5 to comply with Illinois' eight-pound per hour rule 6 was advised by -- by Illinois EPA, and in good 7 faith. This is not a crack at Illinois EPA --8 that you needed to put in afterburners, 9 incinerators, and they spent almost a million 10 dollars on a couple of afterburners. They were in 11 the attainment area, and they did that to make 12 Illinois EPA happy. 13 When I was hired as their 14consultant -- well, the other part of the 15 eight-pound per hour rule is that you don't have 16 to control it if it doesn't meet Illinois' 17 definition of photochemically reactive, so -- and 18 they didn't. They had zero emissions of 19 photochemically reactive material. So they 20 essentially spent almost a million dollars on 21 incinerators that they didn't need. And it's 22 not -- I understand it's not the agency's fault to 23 give advice. Neither is it the agency's mission 24 to give good business advice. It's my mission.

Page 248 1 I didn't help them get around a 2 rule. I helped them comply with what the rule 3 says in a way that makes sense for their business, 4 and that's what I do. 5 And I think it came up in your 0. 6 cross-examination. When you first went to 7 Packaging, what were you retained to do? 8 Α. To get them into compliance. 9 And did you make suggestions of what 0. 10 they should do? 11 I did. Α. 12 Q. And how did they respond to your 13 suggestions? 14From get-go, Dominic and Phyllis and Α. 15 Joe were all -- we just want to put this behind 16 We want to get in compliance. We want to be us. 17 the good corporate citizen. Just tell us what we 18 need to do. 19 And you had previously testified Q. 20 about preparing the annual emissions reports that hadn't been submitted and permit applications and 21 22 everything else; is that correct? 23 Α. Yes, I did. 24 Q. And in this proceeding you have

Page 249 never told Packaging Personified not to comply 1 2 with the regulator? 3 Α. No. I would never do that. 4 MR. HARSCH: I have no further 5 questions. 6 HEARING OFFICER HALLORAN: Thank 7 you, Mr. Harsch. Mr. Grant? 8 RECROSS-EXAMINATION 9 BY MR. GRANT: 10 I just have a question on the Q. 11 selection of the inlet point. I was a little 12 confused by what just happened, but I mean, on 13 direct you testified that the inlet point was 14 chosen by a maintenance person at Packaging, 15 correct? 16 Α. I wouldn't say -- and I think the 17 use of the word "point" is what's confusing here. 18 It's -- I -- the maintenance person directed me to the ductwork that would -- you know, where the 19 20 inlet was. So my question to them was, show me 21 where the gas is coming from, being pulled from 22 the dryer, before the recirculation loop. Show me 23 where that ductwork is. So they pointed me to 24 that ductwork, and then I found the point that met

Page 250 method 1 requirements within that length of 1 2 ductwork. 3 Using where they showed you? Q. 4 Α. Correct. 5 MR. GRANT: That's it. 6 HEARING OFFICER HALLORAN: Thank 7 Do you have anything further? you. 8 MR. HARSCH: No. 9 HEARING OFFICER HALLORAN: Thank 10 you, Mr. Trzupek. 11 Let's go off the record. 12 (Whereupon, a discussion was had 13 off the record.) 14 BY MR. GRANT: 15 I am going to -- I am going to quote Q. 16 you from your deposition transcript, so -regarding the selection of the point. I am going 17 18 to say were you asked this question, and did you 19 give this answer. 20 "Do you remember where your 21 inlet point was?" 22 Answer: "The inlet point was a 23 point that was identified for me. I'm not an 24 expert in press design. So I told -- it's

Page 251 1 misspelt Packing -- Packaging I want a point at the inlet before the oven, and I want a point at 2 3 the outlet for that portion of the stack gas that 4 gets exhausted, and they pointed me to those two 5 points." Is that your testimony? 6 Α. Yes. 7 Is that consistent with what -- the Q. 8 way you just answered? 9 Α. Yes, it is. 10 MR. GRANT: Now I am done. 11 HEARING OFFICER HALLORAN: 12 Mr. Harsch? 13 MR. HARSCH: No further. 14 HEARING OFFICER HALLORAN: You may 15 step down. 16 Let's go off the record. 17 (Whereupon, a discussion was had 18 off the record.) 19 HEARING OFFICER HALLORAN: Back on 20 the record. It's approximately 3:55. Mr. Harsch? 21 MR. HARSCH: At this point in time I 22 call Christopher McClure, please. 23 HEARING OFFICER HALLORAN: Please 24 raise your right hand, Mr. McClure, and the court

Page 252 1 reporter will swear you in. 2 (Whereupon, the witness was duly 3 sworn.) 4 CHRISTOPHER McCLURE, having been first duly sworn, was examined and 5 6 testified as follows: 7 DIRECT EXAMINATION 8 BY MR. HARSCH: 9 Ο. Now, in front of you, you should have what's been marked as Exhibits 64 and 65. 10 11 I do. Α. 12 MR. GRANT: Could I see what you 13 have got here? 14BY MR. HARSCH: 15 0. Are you familiar with these 16 documents? 17 Α. Yes. 18 Ο. Before I get there, I guess, would you please state your full name for the record? 19 20 Α. Christopher McClure. 21 And you previously testified in this Q. 22 proceeding? 23 I did. Α. 24 And who are you currently employed Q.

Page 253 1 by? 2 Α. Crowe Horwath. 3 Q. And who were you retained with when 4 you testified the last time? 5 Α. Previously I was employed with 6 Navigant Consulting in 2009. 7 Q. And outside of that change in who you were employed with, your prior background, 8 9 curriculum vitae, et cetera, is accurate? 10 Α. Yes. 11 0. You previously testified to what you 12 thought was the appropriate economic benefit in 13 this case? 14 That's correct. Α. 15 And can you tell me -- I draw your Q. 16 attention to Exhibit 65. 17 Can you explain what this 18 document is? It's the letter to John Simon, my 19 partner, dated November 19th, 2011. 20 Yes. Α. This is a letter from myself 21 to John Simon, Drinker Biddle, dated October 19th, 2011, and it contains a calculation of an economic 22 23 benefit of \$12,077, which was calculated under the 24 assumptions that are listed here in the letter.

Page 254 1 So it's a very straightforward calculation along 2 the lines of what I had prepared initially in this 3 case, and then attached behind that calculation is 4 an invoice to Packaging Personified from ARI 5 Environmental. 6 Ο. Which you were then -- you were here 7 earlier when Mr. Imburgia testified that that's a true and accurate copy of the bill they got for 8 9 the stack test? 10 Α. That's correct. 11 Ο. And you were provided that by 12 Packaging? 13 Α. Yes, I was. 14 And in this calculation for an Q. 15 economic benefit, what control costs did you 16 utilize? 17 Α. Well, walking through the 18 assumptions that were included here, Item 1, that 19 there was no cost to Packaging as a result of 20 shutting down press 4, shifting to press 5 in 21 December of 2002; Item 2, a cost of \$30,000 and I 22 was provided with a range of 15 to \$30,000 for 23 constructing a total temporary enclosure around 24 press 5.

	Page 255	
1	So I included a \$30,000 estimate	
2	for that cost, and then under Item 3, the dates of	• • • • • •
3	non-compliance, which would be March 15th, 1995	3 (5, * 1)
4	through February of 2004, a stack test performed	ana í. tao i
5	by ARI of \$6,180, which was performed at that	t gy
6	time, and overall that the economic benefit would \circ	
7	be prepared in accordance with the USEPA	,
8	guidelines, which were the same as what we have	
9	utilized previously in this case.	- 19 (602) 12 (60) 10 (60)
10	So those are the variables that	
11	follow onto page 3 of this letter in the	
12	spreadsheet that you can see, and so the	
13	timeframe, the costs are included, inflated and	,- ; - ; - ;
14	deflated according to the specific timeframes in	- 14 ⁻¹
.15	which they occurred and the end result is an $\sqrt{3}$	
16	economic benefit of \$12,077.	
17	Q. And you have read the Pollution	in the control of the second
18	Control Board's opinion that the order that	• •
19	granted the reconsideration?	And the case of the case of the case
20	A. Yes.	
21	Q. And this is the economic benefit	
22	report that we submitted along with the motion to?	AND ALL
23	reconsider that was discussed by the Board?	
24	A. Correct.	
		51492A.2010

Page 256 1 This is a true and accurate copy, Ο. 2 correct? 3 Α. Yes, correct. 4 I'll draw your attention to what I Ο. 5 have marked as Exhibit 64, which was a letter from 6 John Simon dated August 9th, 2012. 7 Would you tell me what this 8 document is? 9 Yes. Α. This is a letter from myself 10 to John Simon. It's very similar to the one that 11 we just covered. The primary distinction here is 12 Item 2, which is a different assumption. The cost 13 of constructing this time a permanent total 14 enclosure would have been \$5,000, and the same 15 stack test in the same amount was included, and 16 similarly, page 3 includes the calculation of the 17 economic benefit. You see the timeframe, and the 18 costs that are included, and the result is \$3,662, 19 which is the economic benefit enjoyed by Packaging 20 under those assumptions. 21 Q. And do you have an opinion as to 22 whether those are the appropriate economic 23 benefits to Packaging, assuming that it could have 24 demonstrated compliance by conducting a formal

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¹ stack test?

2	A. Yes. This calculation reflects
3	exactly that, the assumptions as they are listed,
4	and the methodology, it follows the guidelines as
5	constructed by the USEPA and the BEN manual, and
6	as I previously testified to in this matter and
7	also follows the notion of the least or lowest
8	cost of compliance that's endorsed in Illinois as
9	well. So as making these assumptions, then, yes,
10	this is the calculation that results from the
11	inputs of those variables.
12	MR. HARSCH: At this point in time I
13	will introduce 64 and 65.
14	MR. GRANT: No objection.
15	HEARING OFFICER HALLORAN:
16	Respondent's Exhibit No. 64 and 65 are admitted
17	into evidence without objection.
18	(Whereupon, RESPONDENT'S Exhibit
19	Nos. 64-65 were admitted into
20	evidence.)
21	BY MR. HARSCH:
22	Q. And Question 4, interest due for
23	nonpayment of the economic benefit component of
24	the penalty, was that included in your

١.

Page 258 1 calculations? 2 Α. Not at this time. 3 Can you explain what -- how that 0. 4 would be done? 5 Α. An interest calculation? 6 Ο. Yes. 7 Α. It's simply you would pick a 8 timeframe at which a certain dollar amount is due and you would multiply it by the applicable rate 9 10 for the time period at issue. So that's a 11 straightforward calculation. 12 Q. So it would be economic benefit you 13 calculated times the time period? 14 Α. Correct. 15 0. Have you -- there were a number of 16 comments, statements of fact, made by the Board, I 17 guess, in their findings in the Board's opinion 18 where they discussed the economic benefit 19 components. That's the March 1st, 2012 opinion 20 that granted the motion to reconsider. Are you in 21 agreement with all of those? 22 Well, I think we have to go through Α. 23 them, but in general, my understanding of it is 24 that the Board was focused on a couple of items;

Page 259 1 one, that the lowest cost alternative, which is 2 really a key attribute of correctly calculating 3 economic benefit has not yet been considered or 4 that there is another alternative that we are 5 still here today to review, which I agree with, 6 and they need to -- of course, we need to 7 understand what the lowest cost alternative would 8 be, and that's what we have calculated here in the 9 exhibits that we previously discussed. 10 And then the motion for 11 reconsideration discusses what occurred in the 12 Board's opinion from the last hearing, and I 13 reviewed that opinion as well. Generally speaking, it appears to me that the Board took the 14 15 information from my calculations and from the 16 calculations offered by Mr. Styzens. Generally it 17 appears that the Board agrees and everyone agrees 18 with the methodology that was employed to 19 calculate economic benefit. Where we differ 20 substantially are the variables that go into the 21 model. 22 So everyone agrees as to the 23 general framework, but the variables that are 24 input are in dispute and, of course, as a result,

Page 260 1 the output of the models vary significantly. 2 So it appears that the Board 3 took an intermediate position attempting to split 4 the difference between myself and Mr. Styzens by 5 averaging some costs and selecting some time 6 periods and coming up with a number that 7 essentially splits the difference. I guess that is a way that -- they are free to do that. 8 9 It doesn't reflect a buildup of 10 costs or a buildup of a model to understand what 11 the actual results would be, and it also -- I 12 guess at this point we understand that there are 13 other lower cost alternatives that need to be 14 considered. So those are the general comments 15 that I had on the position of the Board and their 16 approach for reconsideration. 17 Ο. Are there other lower cost 18 alternatives other than conducting a stack test? 19 Α. As we discussed last time, we -- the 20 variables that we included and that I included in 21 my model in the last hearing, there was an 22 alternative to use or to buy an RTO that was 23 appropriately sized for the press in question. 24 So one of the key discussions

Page 261 1 and key points of contentions was the appropriate 2 size of the RTO, and the Board recognized and 3 pointed out the excerpt from the BEN manual 4 literature that indicates that when you have a 5 company that has a situation where they are 6 preparing for an increase in capacity and they 7 purchase a control device or a compliance solution 8 that is larger to accommodate future growth, in a 9 sense they shouldn't be penalized for that. 10 So you have to assess the 11 appropriate amount that was required to get into 12 compliance. So using the numbers that we had last 13 time, Mr. Styzens had a \$250,000 number for an RTO that was sized for three presses. My position was 14 15 that the RTO should be sized appropriately for the 16 one press at issue, and the estimate that I was 17 provided was \$75,000 for an RTO that would be an 18 appropriate size. So installing an appropriately 19 sized RTO would have been another potential 20 compliance approach. 21 Q. And that economic benefit was 22 calculated and provided in your prior testimony? 23 Α. That is correct. 24 And that would be available even if 0.

Page 262 the Board were to find that -- somehow that we 1 2 didn't establish that press 5 could be found to be 3 in compliance if we had performed a formal stack test? 4 5 That's correct. They have that Α. 6 information and that is a lower cost alternative 7 calculation. 8 Ο. Is the concept of shutting down an 9 emission source and transferring the business such 10 as Packaging did consistent with the BEN model as 11 far as you are concerned? 12 HEARING OFFICER HALLORAN: Could vou 13 speak up, Mr. Harsch? I don't know if the mike is 14 not on or it's getting late in the game. 15 MR. HARSCH: I'm sorry. 16 HEARING OFFICER HALLORAN: It's 17 really hard to hear. 18 BY MR. HARSCH: 19 0. Strike that question. 20 Mr. McClure, Packaging has 21 proposed -- did shutdown press 4 and transfer the 22 business to press 5, and you were here earlier in 23 the day when Mr. Imburgia testified how that was 24 accomplished and his opinion they had the capacity
throughout all the years to have operated all of the business on press 5 without press 4. Is that concept consistent with the BEN model in your opinion?

A. Yes, it is. The BEN model or the BEN methodology requires that you evaluate the variables at issue given the company's specific business situation and the regulations that they are subject to at the time and to evaluate what's the lowest cost alternative for achieving compliance.

12 Clearly if you shut down a 13 source of emissions then you wouldn't be required 14 at that point, to my understanding, to purchase a 15 control device for one that's not operating, and 16 you can certainly transfer capacity, if you have a 17 situation where that's feasible within the 18 constructs of your business, and in my opinion 19 listening to Mr. Imburgia, that's certainly what 20 occurred with Packaging.

21 MR. HARSCH: I don't have any 22 further questions. Thank you.

HEARING OFFICER HALLORAN:
Mr. Grant?

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1	CROSS-EXAMINATION
2	BY MR. GRANT:
3	Q. Hi, Mr. McClure. Chris Grant.
4	First, your opinion only has to
5	do with the economic benefit of non-compliance and
6	not with a violation, correct?
7	A. My opinion has to do with the proper
8	calculation of economic benefit.
9	Q. But not the violation? Not whether
10	or not something was a violation?
11	A. Correct.
12	Q. Okay. Your let's see. In its
13	2009 order was it 2009? I thought it was.
14	Well, in its order the Board
15	found Packaging in violation for operation of
16	press 4 without control for seven years off the
17	top of my head, 7 or 8 years, are you aware of
18	that?
19	A. I believe that's what the order
20	said.
21	Q. And your opinion contains no
22	recovery of any economic benefit for the operation
23	of press 4; is that correct?
24	A. I'm sorry. Can you restate your

Page 265 1 question? 2 Q. Sure. Your opinion ignores 3 violations for running press 4 without control 4 from 1995 to 2002; isn't that correct? 5 The calculation as stated here Α. 6 includes that as the time period. 7 0. I am asking you that as a guestion. 8 Α. From 19 -- yes, it does, from 9 1995 --10 Q. It ignores it. In other words, 11 hypothetically, we are ignoring that violation for 12 the purpose the opinion; isn't that correct? 13 My opinion takes into consideration Α. the time period that's included in these exhibits, 1415 which includes the time period that you are 16 discussing and the costs that would have been 17 required under these assumptions to obtain 18 compliance. 19 0. Your opinion recovers no economic 20 benefit for the violations found by the Board from the operation of press 4 from 1995 to 2002? 21 22 Α. That's not accurate. 23 Ο. Yeah, it is accurate. 24 Α. There is no -- the economic benefit

Page 266 1 calculations that were provided to you both at the 2 hearing and the ones that are here in these 3 exhibits, the methodology is clear. The 4 assumptions that are made are clear, and the 5 timeframes that are outlined are clear. 6 Ο. What you are doing is what the Board 7 directed hearing on. You said hypothetically 8 let's ignore the operation of press number 4 for 9 the purpose of that, correct? Is that what the 10 Board order said in March --11 You're going to have to -- why don't Α. 12 you show me what you are referring to. 13 Ο. This is your opinion; does your 14 opinion include any consideration of the economic 15 benefit for running press number 4 in 16 non-compliance from 1995 through 2002? 17 Α. The opinions that are stated in 18 these exhibits --19 Ο. No. Does your opinion include that? 20 Α. Yes, it does. And I am answering. 21 These exhibits as stated here have the timeframe 22 that's --23 I understand the timeframe. 0. 24 Α. And it's -- and the -- there is no

Page 267 1 cost -- you can see the specific assumptions that 2 are made throughout the report, so --3 Ο. Why don't you explain to me if --4 where you recovered the economic benefit of 5 non-compliance for violations that were found by the Board -- that were found by the Board for 6 7 running press 4 1995 -- for actually running and not ignoring -- from running press 4 through --8 9 from 1995 to 2002 without any control, whatsoever. 10 Now, that's a violation that was 11 found by the Board. Does your opinion recover, 12 you know, deal with the economic benefit of that 13 violation? 14 It does, and you have to look to the Α. 15 variables of the specific --16 0. Show me where. 17 Α. -- scenarios. 18 Show me where. It's a short 0. 19 opinion. It's only one page. 20 Well, again, we have looked at --Α. 21 well, I have just explained them here in the 22 direct and I have explained the timeframe and the 23 costs that are associated in order to get into 24 compliance. So they are pretty self-evident.

Page 268 1 Q. Well, Mr. McClure, I wouldn't be asking the same question five times if they were 2 3 self-evident. 4 Show me in here where your 5 opinion recovers economic benefit of 6 non-compliance that was found -- the violation was 7 found -- your opinion doesn't recover any economic 8 benefit for those violations that were found? 9 MR. HARSCH: Is that a question or a 10 statement? 11 BY MR. GRANT: 12 Ο. It's a question. 13 Α. Well, as I have outlined in the 14 various --15 MR. GRANT: Can you read -- I'm 16 sorry. Mr. Halloran. He is avoiding a very 17 simple question. 18 HEARING OFFICER HALLORAN: What do 19 you want me to do? 20 MR. GRANT: Could you ask the court 21 reporter to read the question back? 22 HEARING OFFICER HALLORAN: Kari, 23 could you reread the last question for him, 24 please?

Page 269 1 (Whereupon, the record was read 2 as requested.) 3 BY THE WITNESS: 4 Α. Can you restate your question? 5 BY MR. GRANT: 6 0. And so is that --7 Α. And I think I have answered it. 8 Q. You haven't answered the question. 9 Now, it's true that your opinion does not recover any economic benefit, whatsoever, 10 for violating Section 218.401 regulations by 11 operating press number 4 from March 15th, 1995, 12 13 through December of 2002. It doesn't recover any 14 of it, does it? 15 Α. The economic benefit calculations 16 that I provided both here and previous -- in 17 previous testimony provide a number of assumptions 18 and variables that outline the economic benefit 19 under the circumstances of Packaging Personified's 20 history. 21 All right. I will ask it again. 0. 22 Α. So the numbers have been included --23 Define them for me. Q. 24 Α. -- here and here and in my prior

Page 270 1 report. 2 Q. I want the number in dollars that 3 you found for economic benefit for violations 4 related to press 4 operating without control from 5 March 15th, 1995 through December of 2002. 6 Α. And depending upon the control 7 approach that's taken --8 Ο. No. This one right here. 9 Α. -- the amounts are included, and 10 those are provided here. 11 0. No. Okay. Please find the amount for me, and tell me what the dollar amount is. 12 13 Α. The dollar --14 HEARING OFFICER HALLORAN: Which 15 exhibit are we talking about, Mr. Grant? 16 MR. GRANT: I have got 64 and then 17 Exhibit 20, but it's the same thing. 18 HEARING OFFICER HALLORAN: I'm 19 sorry. Proceed. 20 BY MR. GRANT: 21 Where is the number? Ο. 22 Α. The number on Exhibit 64 is laid out 23 in the --24 Q. Mr. McClure, if you didn't include

Page 271 1 that number, I want you to say I did not include a number for violations found by the Board for that 2 3 operation. If you did include a number, I would 4 like to have you tell me what it was. 5 I'm sorry. I'm not understanding Α. what you are missing about my explanation. 6 Ι 7 can't --8 Q. I am speaking English I know that. 9 HEARING OFFICER HALLORAN: Where are 10 we going to go with this? 11 MR. GRANT: This testimony is 12 nonresponsive. 13 HEARING OFFICER HALLORAN: You know, 14I think the Board can glean from the record his 15 testimony and whether he answered the guestions or 16 not. 17 BY MR. GRANT: 18 0. So there were a number of violations 19 found by the Board that are not included in here. 20 This is -- this opinion just deals with VOM and 21 controlling VOM and all that sort of stuff. So 22 the opinion that you have in front of you -- well, 23 let me just say first, the Board found that --24 MR. HARSCH: Are you making a

1 statement or asking a question?

2 BY MR. GRANT:

Q. The Board found that Packaging violated the Environmental Protection Act by failing to obtain a CAAPP permit. Your opinion does not recover any economic benefit related to Packaging's failure to obtain a CAAPP permit on a timely basis, correct?

9 MR. HARSCH: Mr. Hearing Officer, I 10 am going to object to that question, because it's 11 beyond the scope of what the Board sent us back to 12 hearing on. And we had nothing to do with 13 recovery of an economic benefit for not obtaining 14a CAAPP permit. I don't see any of that in the 15 Board's order, nor do I see any economic benefit 16 claim being put forth by the State in the first hearing that we had for failure to obtain a CAAPP 17 18 permit.

HEARING OFFICER HALLORAN:
 Mr. Grant?

MR. GRANT: This is -- what this is -- this questioning is to find out what he considered and what he didn't. The violations were found. This is his economic benefit model

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1	for the total economic benefit of the case, and if
2	he didn't consider it, say you didn't consider it.
3	I just considered operating press 4 or a
4	hypothetical non-violation of press 4.
5	HEARING OFFICER HALLORAN:
6	Mr. Harsch, I respectively agree with the State.
7	So the objection over ruled.
8	BY MR. GRANT:
9	Q. I think there is a question pending
10	regarding the CAAPP permit. The violation for
11	failure to obtain a CAAPP permit on a timely
12	basis, your opinion does not consider that
13	violation at all, does it?
14	A. The costs for that CAAPP permit are
15	nod included in here or an assumption
16	Q. Your opinion nothing in your
17	opinion recovers economic benefit for failure to
18	get a CAAPP permit?
19	A. That's not included in the
20	assumptions that are in these models.
21	Q. I am talking about an opinion and
22	not the models.
23	A. My opinions are stated here in these
24	models based upon the assumptions that I have

 1 included.

2	Q. Okay. Let me just state for the
3	purpose of everybody here, we have a failure to
4	obtain operating permits. We have a failure to
5	obtain construction permits. We have a violation
6	of permit conditions and we have a failure to
7	retain records. I am sure I am forgetting
8	something. And we have and then we have the
9	economic benefit based on not or failure to
10	control volatile organic material. These are all
11	violations. I know what the Board sent us to
12	hearing for.
13	They sent us to hearing on let's
14	pretend that press 4 didn't operate and not
15	consider those for lowest cost alternative.
16	This this is a preliminary question. This
17	doesn't include nothing in this \$3,000 economic
18	benefit includes anything for those violations.
19	The violations were found, and he is evading
20	answering a very simple question.
21	HEARING OFFICER HALLORAN: Well, the
22	Board can decide that, and I will look into it.
23	Mr. Harsch?
24	MR. HARSCH: In response to that?

1 HEARING OFFICER HALLORAN: Yes. 2 MR. HARSCH: I believe the Pollution 3 Control Board can find these were violations that 4 imposed a significant civil penalty that's not at 5 issue today. 6 In addition, I don't believe 7 that there has been any claim by the State or any 8 evidence put forth so that the -- there is concern 9 over imposition of an economic benefit portion of 10 a penalty beyond the civil penalty that was 11 imposed by the Board for the permit conditions or 12 not submitting a permit application on time, et 13 cetera, et cetera, in large part because the 14 company did subsequently apply for those permits 15 and obtained the permits. 16 The witness has testified to his 17 conclusions and the inputs and the conclusions 18 based on those regarding the economic benefit 19 attributable -- the lowest cost economic benefit 20 attributable if Packaging is able to show that it 21 could have transferred all of the production from 22 press 4 to press 5 and demonstrate compliance with 23 the regulations through conducting a formal stack 24 That's what was remanded back here, and test.

Page 276 1 that's what we are here today for. 2 HEARING OFFICER HALLORAN: All 3 right. You know, I am going to leave it in the 4 competent hands of the five boards members. Ι 5 think, Mr. Grant, you have asked the question 6 enough, and I think the Board can take a look and 7 figure out if he answered or he didn't answer. 8 MR. GRANT: I agree. It was -- I 9 thought this would take 30 seconds, but we have 10 got a paid expert witness who refuses to answer 11 direct questions. At least that's in the record. 12 MR. HARSCH: Mr. Hearing Officer, I 13 really object to the characterization, and you 14 have already --15 HEARING OFFICER HALLORAN: Yeah. Ι 16 already ruled, Mr. Grant. 17 It's --MR. GRANT: 18 HEARING OFFICER HALLORAN: Mr. 19 Grant, I was still talking. I know it's getting 20 late in the day, but people are talking over me, and it started around 1:00, and I am not really 21 22 happy about it. So if we could just move on. 23 BY MR. GRANT: 24 0. Yeah, I will.

Page 277 1 Mr. McClure, all the 2 information, all the assumptions in this letter I am dealing with in Exhibit 64 were provided to you 3 4 by the counsel for Packaging Personified, correct? 5 Α. Yes, on the underlying invoice that came from the company. 6 7 Q. Okay. You don't have any personal 8 knowledge about the cost of the total temporary 9 enclosure or permanent total enclosure, correct? 10 Α. Those estimates are provided to me. 11 You have no personal knowledge about Q. the hours of operation of presses 4 and 5 between 12 13 1995 and 2002; isn't that correct? 14 Α. What do you mean by personal 15 knowledge? 16 Yes, personal knowledge. Ο. 17 Α. Meaning -- how do you describe that? 18 I'm sorry. 19 I personally know. I wasn't told. Q. 20 Α. Meaning, I was -- I was not --21 Q. Well, how do you describe personal 22 knowledge? 23 Α. It's your question. I'm sorry. Go 24 ahead.

Page 278 1 0. Well, what do I mean by personal 2 knowledge? 3 Α. Yes. 4 Ο. How do you define personal 5 knowledge? 6 I assume you mean was I at Packaging Α. 7 Personified in 1995? 8 Q. If I say this is May, do I have to 9 explain that? 10 Α. I was not. I'll finish my answer, 11 if that's all right. 12 THE COURT REPORTER: Excuse me. 13 HEARING OFFICER HALLORAN: You know what? Kari only has two ears and she can't type 14 15 that fast. Mr. Grant, in the last few minutes you 16 have been talking over the witness. Speak to me if you want to speak to have the witness stop. 17 18 MR. GRANT: I'm sorry. 19 HEARING OFFICER HALLORAN: All 20 right. You may continue. 21 BY THE WITNESS: 22 Α. I was not personally at Packaging 23 Personified in that time period. 24 BY MR. GRANT:

Page 279 1 0. Have you ever been to Packaging 2 Personified? 3 Α. No. 4 MR. GRANT: For the record, I am 5 going to move to strike his testimony as 6 nonresponsive. 7 HEARING OFFICER HALLORAN: Denied. 8 Mr. Harsch? 9 MR. HARSCH: I'm sorry. I didn't 10 completely hear what he was --11 MR. GRANT: Move to strike his 12 testimony as nonresponsive. 13 HEARING OFFICER HALLORAN: T m 14 sorry. Mr. Grant, can you speak up? 15 MR. GRANT: I think I am through talking for the day, because the next witness is 16 17 Ms. Sangha's. So I apologize for getting 18 flustered. 19 HEARING OFFICER HALLORAN: So noted. 20 Mr. Harsch? 21 MR. HARSCH: I believe the witness 22 has been responsive. He has explained what his opinion was based on. He pointed out to Mr. Grant 23 24 where his assumptions were and how he came up with

Page 280 his calculation. I believe he has been very 1 2 responsive. It may not be the answer Mr. Grant 3 wants, but --4 HEARING OFFICER HALLORAN: Okay. He 5 moved to strike. I denied it, and now you are --6 MR. HARSCH: I did not hear you. 7 I'm sorry. I did not hear you deny his motion. 8 HEARING OFFICER HALLORAN: Yes, I 9 did. 10 MR. HARSCH: I thought you were 11 asking me to respond. 12 HEARING OFFICER HALLORAN: No. You 13 stated earlier that you think he is being 14 responsive and I said the Board will take a look 15 at the record and, you know, see whether or not 16 that he has answered or not. 17 MR. HARSCH: I believed he had made 18 a new motion and you were asking me to respond. 19 HEARING OFFICER HALLORAN: No. 20 Well, number one, I have never granted a motion to strike so -- and I am not sure I am allowed to, 21 22 but in any event, so where are we now? 23 REDIRECT EXAMINATION 24 BY MR. HARSCH:

Page 281 1 I have a couple of short follow-up 0. 2 questions. 3 Mr. McClure, under the economic benefit calculation, the BEN policy manual that 4 5 USEPA has on guidance, you are familiar with that? 6 Α. Yes. 7 You went into it in great detail in 0. 8 your prior testimony? 9 Α. Yes, we did. 10 Ο. You have continued to remain current 11 with respect to developments that have occurred and decisions rendered, et cetera? 12 13 Α. Yes, and I continue to work in that 14 area. 15 Q. This is your business, providing 16 these kinds of opinions? 17 Α. That's correct. 18 Is there any specific -- is there a Ο. 19 difference between the imposition of a penalty for 20 the violation and the determination of an economic 21 benefit penalty? 22 Α. Well, I believe that the way the BEN methodology describes it as the distinction 23 24 between an economic benefit and a gravity or other

1 component. And they make a specific delineation 2 between the two, and it's clear that the economic 3 benefit component covers specifically those -- the 4 benefit or detriment, perhaps, that the company 5 incurred during its -- or may have experienced 6 during its period of violation subject to a 7 variety of variables that would be input into a 8 model. And again, that's separate and distinct 9 from what a court or a Board might impose for 10 gravity.

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In the economic benefit world, you look at a series of assumptions that go into a model and the results that come out, which may be positive or negative, depending upon the specific attributes of the circumstance.

Q. And is it your understanding that the Pollution Control Board entered a penalty for the violations that it found that would be the equivalent of a gravity-based penalty?

A. That's what I understood from
reading their order.

Q. And what we are here to talk about today do you understand to be the appropriate economic benefit, lowest cost penalty assessment?

Page 283 1 Α. That's correct. More specifically, 2 yes. 3 Is there a requirement anywhere in Q. 4 the guidance that you are aware of from USEPA, the 5 BEN model, that an economic benefit penalty always 6 has to be assessed? 7 Α. No. I mean, and even if that 8 requirement is to be evaluated, the results -- you 9 may find that the results are negative, because 10 even the methodology itself provides for that fact 11 that there may be some other foregone benefits 12 that the company may have enjoyed by installing a 13 compliance system that they lost out on. So you 14 have to just look at what the numbers tell you and 15 what the model concludes. 16 0. And in terms of violations, for example, of failure to obtain a permit, if the 17 18 company then subsequently applies for a permit, 19 submits the cost of submitting the application, 20 having it prepared, et cetera, then in the economic benefit calculation world it would be 21 22 simply that they have spent the money. It would 23 be just a value of the deferment? 24 Α. That's correct. If you -- for any

Page 284 specific cost that it's determined that you may 1 2 have achieved an economic benefit, you can look at 3 that cost and determine whether it should have 4 been incurred, for example, at an earlier time, 5 and if it's simply a cost that should have been 6 incurred at an earlier time, you enjoy the time 7 value of those dollars, and you can input those 8 variables and get that result. 9 MR. HARSCH: No further questions. 10 HEARING OFFICER HALLORAN: 11 Mr. Grant? 12 RECROSS-EXAMINATION 13 BY MR. GRANT: 140. Mr. McClure, I didn't get your 15 compensation. Could you describe your 16 compensation for your work on this case? 17 Α. I have an hourly rate of \$450 an 18 hour. 19 0. And can you tell me approximately 20 what your total compensation has been on this --21 let's take it after the last hearing, so just from 22 the motion to reconsider on. 23 Α. I have -- I would estimate I have 24 put in about 20, 25 hours, maybe, in the last --

Page 285 1 since September of 2011, I believe. I believe 2 that's the timeframe there we have had some 3 continued work. 4 MR. GRANT: That's it. 5 HEARING OFFICER HALLORAN: Anything 6 from Mr. Harsch? 7 MR. HARSCH: No. 8 HEARING OFFICER HALLORAN: You may 9 step down, Mr. McClure. Thank you. 10 Mr. Harsch are you going to rest 11 now or --12 MR. HARSCH: I have no further 13 witnesses on direct. 14 HEARING OFFICER HALLORAN: 15 Mr. Harsch, I am looking at Respondent's 16 Exhibit 61 you didn't move it into evidence. Did 17 you intend to? 18 MR. HARSCH: I thought it was moved 19 into evidence. 20 HEARING OFFICER HALLORAN: Yeah, I had this one out. It's the -- do you have it in 21 22 front of you, State? 23 MS. SANGHA: It has no title, but 24 yes.

Page 286 1 HEARING OFFICER HALLORAN: Okay. 2 Yeah, I am going to have to look into the record, 3 but you have it in front of you. Do you have an 4 objection for it to be moved into evidence? 5 MS. SANGHA: We were considering, 6 but I guess we won't object. We have never seen 7 this before a couple days ago, but no objection. 8 HEARING OFFICER HALLORAN: It's 9 admitted. 10 (Whereupon, RESPONDENT'S Exhibit 11 No. 61 was admitted into 12 evidence.) 13 HEARING OFFICER HALLORAN: And also, 14 you may want to move it later when the witness 15 comes up, State, but Complainant's Exhibit 22, I had that here, and it wasn't moved, the May, 1st 16 of 2003 letter. 17 18 MR. GRANT: We would like to move it 19 into evidence. 20 HEARING OFFICER HALLORAN: 21 Mr. Harsch, any objection? 22 MR. HARSCH: No. 23 HEARING OFFICER HALLORAN: Okay. 24 Complainant's Exhibit 22 is admitted.

Page 287 1 (Whereupon, COMPLAINANT'S 2 Exhibit No. 22 was admitted 3 into evidence.) 4 HEARING OFFICER HALLORAN: All 5 right. State, you are on. 6 MS. SANGHA: I would like to call 7 Kevin Mattison. 8 HEARING OFFICER HALLORAN: Okay. 9 Mr. Mattison, would you raise your right hand and 10 Kari will swear you in. 11 (Whereupon, the witness was duly 12 sworn.) 13 KEVIN MATTISON, having been first duly sworn, was examined and 14 testified as follows: 15 16 DIRECT EXAMINATION 17 BY MS. SANGHA: 18 0. Could you please state and spell 19 your name for the record? 20 Kevin Mattison, M-A-T-T-I-S-O-N. Α. 21 0. And where are you employed, 22 Mr. Mattison? 23 Α. The Illinois Environmental Protection Agency. 24

Page 288 1 And how long have you been employed Q. 2 by the Illinois EPA? 3 Α. Since 1993. 4 0. And what is your educational 5 background? 6 Α. I attended the University of Illinois and received a degree in -- bachelor of 7 8 science in engineering. 9 And what is your current position 0. 10 with the agency? 11 Α. I am an environmental protection 12 specialist 4. Can you describe your job duties as 13 Ο. 14 an environmental protection specialist 4? 15 As an environmental protection Α. 16 specialist 4, I am involved in ensuring that the emission testing done in the State of Illinois as 17 18 well as continuous emission monitoring done in 19 Illinois is done properly and correctly. 20 Q. And could you describe for us what 21 emissions testing is in general terms? 22 Α. In general terms, emission testing 23 is evaluating emissions out of the stack, in most 24 cases regulated pollutants, whether it be SO2,

Page 289 nitrogen oxide, volatile organic material in this 1 2 case. 3 0. And is overseeing emissions testing in Illinois your primary job duty? 4 5 Α. Yes, it is. 6 And describe what's involved in 0. 7 overseeing emissions testing. 8 Α. The first thing we do is we get 9 notified of an emission test and with that 10 notification comes a protocol, an emission test plan. We evaluate that plan to ensure that the 11 12 rules and regulations are being followed and the 13 correct methodologies are being employed to obtain 14 valid data. 15 Ο. And does that also involve attending 16 the stack testing while it's occurring? 17 Α. Yes. It also entails witnessing 18 testing. Obviously, with budgetary constraints 19 we as the State of Illinois and myself are unable 20 to attend all of those and then also after the 21 test is done, a final report is submitted, and we 22 then -- or I evaluate the validity of that test 23 report. 24 And how long have you been doing Q.

Page 290 1 this particular job for the agency? 2 Ever since I started with the agency Α. 3 in 1993. 4 And have you been relied upon by 0. 5 other government agencies in this capacity? 6 Α. Yes, I have. USEPA Region 5 7 consistently calls upon me to assist them with 8 their testing questions. 9 0. And are you being paid anything 10 beyond your normal salary for your attendance here 11 today? 12 Α. No, I am not. 13 0. Are you familiar with the subject 14 matter of this case? 15 Yes, I am. Α. 16 0. And are you familiar with the 17 informal stack test that was conducted on press 5 18 at the Packaging Personified facility that's at 19 issue in this case? 20 Α. Yes. 21 0. I would like to direct your 22 attention to an exhibit that's already in 23 evidence. It's Complainant's Exhibit 8 from the 24 prior hearing. You have a book in front of you.

Page 291 1 It should be tabbed. 2 Exhibit 8? Α. 3 Q. Complainant's Exhibit 8. 4 Α. March 31st, 2003? 5 0. That's correct. 6 Α. Yes. 7 Have you seen this document before? Q. 8 Α. Yes, I have. 9 Ο. Can you describe for us what it is? 10 Α. This is the summary of the informal 11 testing done by Mr. Trzupek. 12 And if you will turn to page 2, is Ο. 13 that you that's cc'd on the test results? 14 Α. Yes, it is. 15 Q. And just to be clear, the agency didn't receive any of the test protocol prior to 16 17 the conducting of this informal test? 18 Α. No, we did not. 19 0. Okay. And you didn't receive any 20 other results or documentation other than what we 21 see right here? 22 Α. That is correct. This is all we 23 have. 24 Q. But you have had the opportunity to

Page 292 1 review this test in detail? 2 Α. Yes, I have. 3 And have you reviewed Rich Trzupek's 0. 4 testimony? 5 Α. Yes, I have. 6 0. And the other documents in evidence? 7 Α. Correct. 8 Ο. Based on your review of this 9 Complainant's Exhibit 8, the informal test 10 results, as well as Trzupek's testimony regarding 11 this informal test, what is your opinion as to its 12 reliability for determining whether or not the recirculating tunnel dryer was acting as a control 13 14 device on press 5? 15 Α. Based upon the information 16 presented, the date is unreliable and not 17 statistically valid. 18 Q. And can I direct you to what's 19 marked as Complainant's Exhibit 15, which is 20 unartfully titled as Complainant's Exhibit 15? 21 Α. Yes. 22 0. Can you describe for us what this 23 document is? 24 Α. This is a summary of my evaluation

1 of that informal test.

Q. Thank you, Mr. Mattison. I am going
 to ask you some questions now, and we will just go
 through this point by point.

5 So if I could direct your 6 attention to subpoint A. If you could explain how 7 subpoint A supports your general opinion that the 8 test was not reliable and the results were not 9 statistically valid?

10 Α. Yes. The -- the test that was 11 performed is an engineering test as indicated by 12 Mr. Trzupek. It is just that. It's a quick and 13 dirty way of looking at potentially what's there. 14 When we are documenting, we are determining 15 compliance with the regulations, the rules and 16 regulations are very clear, as well as this 17 methodology, and we need a minimum of three runs 18 to do a statistical analysis of the data and in 19 accordance with Document 035 to determine whether 20 or not that data is statistically in the same ballpark of one another. 21

Without that, we have a picture of a few data points to determine compliance of that system. We can't even run a statistical

¹ analysis of it.

Q. And how does having three runs help
 ³ you to get data --

4 Α. Well, with one run, and an 5 abbreviated run at that, you don't know whether or 6 not that is going to be repeatable. Now, if you do one run, that's the only thing you have to look 7 8 If you do two runs, you know, there may be at. 9 two different numbers and you average them out, 10 and you -- then you can apply a statistical 11 analysis of that data.

Q. And is there ever an occasion where a company would be required to do more than three runs?

15 Α. In the realm of capture efficiency 16 testing, when a facility chooses to use 17 alternative capture test techniques, you -- one 18 would have to demonstrate compliance with the data 19 quality objective standard. If you are an ERMS 20 participant or if the data indicates potential 21 non-compliance, you would have to generate enough 22 data to make sure it meets the data quality 23 objective before we would enter into a 24 non-compliant arrangement with violation notices.

Page 295 1 Okay. And if you could turn your Ο. 2 attention to subpoint B, and please describe for 3 us how the comments that you have made here 4 support your general opinion about the 5 unreliability of the test and its results? 6 As Mr. Trzupek pointed out, I had to Α. 7 make some assumptions. There was only three pages 8 submitted to the agency. A lack of data prevents me from making anything else other than 9 10 assumptions of this data. When a formal stack 11 test comes in, we have a lot of data. We have the 12 actual raw data sheets, the exact location of 13 where the testing was done, the actual organic 14concentration, the FID data points, the 15 calibration of that information, all that's put 16 into the test report to validate that data. 17 All we have here is a three-page 18 summary of what was done, but with no supporting 19 documentation. So with point B, we had to make 20 that assumption of that was 40 pounds an hour. Was it really 40 pounds an hour? The regulations 21 22 very clearly indicate that that has to be an exact number, especially when we are doing liquid to gas 23 24 mass balance, because if those numbers are off,

Page 296 our calculations are off. Our assumptions are 1 2 off, as Mr. Trzupek pointed out. 3 So when it comes down to this, 4 there is no information as to what the actual 5 inlet number is -- input number is other than 6 40 pounds an hour of VOM. Was it really 41? Was 7 Was it 42 and a half? it 35? I don't know. 8 0. And was there any information in 9 evidence that caused you to question whether or 10 not 40 pounds an hour of VOM was an accurate 11 number? 12 Α. Based upon the other data presented 13 today, as well as in other depositions, there was 14 a maximum ink usage rate of 20 pounds per hour in 15 there, and I don't even know if they were 16 operating at 100 percent capacity that day of the 17 test. 18 Q. And just to be clear, you are 19 referencing an exhibit that you reviewed, it's 20 Complainant's Exhibit 13 and it's already in 21 evidence. It's a letter dated May 2nd, 2003, and 22 I think you are referencing some of the 23 attachments to that letter. Is that the pounds 24 per hour information?

Page 297 1 Α. That is correct. 2 HEARING OFFICER HALLORAN: Ms. Sangha, could you speak up? I've got the 3 4 machine going on in the back here. 5 MS. SANGHA: No problem. Please let 6 me know if you can't hear me. 7 BY THE WITNESS: 8 Specifically, Attachment D, as in Α. 9 David, has a chart in here of number 5 -- press 10 number 5 before control, ink usage, maximum 11 20 pounds per hour, and average of 16. 12 BY MS. SANGHA: 13 Q. Thank you, Mr. Mattison. 14 Now, if you can turn the page, 15 and we will discuss your subpoint C. And please 16 describe to us how this portion of your opinion 17 supports your overall conclusion about the unreliability of the test and the data results? 18 19 Α. My point C references the issue with 20 regards to the input data, inlet data, where it 21 was measured. We have several different things, 22 as Mr. Trzupek pointed out. We have the 23 discretion about the VOM in comparison with the as 24 propane versus as organic compounds, the

Page 298 1 measurement of apples and apples. That's very 2 true. 3 Rules and regulations require us to bring that back into measuring apples and 4 5 It also requires us to measure that on a apples. 6 dry standard cubic feet basis. That's one point 7 there. 8 The other point that -- why 9 we -- I make the statement, it grossly 10 misrepresents the efficiency is -- as we all 11 pointed out today, this is a recirculating oven. 12 And in order to get an accurate determination of 13 capture efficiency, you take the -- when you are dealing with liquid to gas mass balance, you take 14 15 the amount of potential organics that are capable of being emitted, and then you are trying to look 16 17 at how much did the capture system or oven 18 collect? And in this case, Mr. Trzupek measured 19 somewhere in that oven the flow rate, and I think 20 I pointed out that it was like two and a half 21 times higher than what was going out, and so the 22 statement was, well, that's a recirculating flow, 23 so, of course, it's going to be higher. 24 Well, when you have got
Page 299 recirculating flow and you have got flow coming 1 2 in, the actual organics being captured is not the 3 recirculating flow. It's what flow comes in, and then on top of that you've got recirculating 4 5 organic material. So you have got -- it goes 6 through the system once. You count it on the FID 7 at the inlet. It goes through -- it may get 8 reduced somewhat, as pointed out earlier today, 9 but you still have some left over. It gets 10 recounted again by that FID. It's an additive 11 effect. 12 So now we have inflated the 13 amount of organics that we have indicated by this 14 estimated test of what we have captured, and I 15 don't see how we can have any science behind that 16 that's a valid number. 17 And that's because you are 0. 18 overestimating the total amount of volatile 19 organic materials that had a potential of 20 recapture? 21 That's correct. Α. 22 0. And could you point out for us in 23 the Complainant's Exhibit 8, which is informal 24 test results, where those numbers are that you are

Page 300 discussing in terms of the differential between 1 2 one number and the other? 3 Α. It's on page 3 of his report on the 4 very bottom where it says DC -- DSCFM, dry 5 standard cubic feet per minute. Column 1 is the 6 inlet, 2,417 and dry standard cubic feet per 7 minute. The second column over, same row, dry 8 standard cubic feet per minute at the outlet, 818. 9 And is it typical to see a spread 0. 10 like this in terms of flow at the inlet and flow 11 at the exhaust? 12 Α. Not of a control system, no. 13 Ο. Mr. Mattison, I wanted to ask --14 back up a little bit and ask you again about, I 15 think, subpoint C and again, I'm not an expert on 16 this, as related to the issue of response factor, 17 which is something that's been discussed today, 18 that you would need to create a response factor. 19 Could you explain that a little bit more, or am I 20 incorrect in assuming that that's connected to 21 subpoint C? 22 Ά. No. That is correct. In Mr. 23 Trzupek's testimony he did a good job of 24 explaining what a response factor is and how that

Page 301 1 does adjust the concentrations down. It wasn't 2 done here, and therefore, it invalidates the data 3 to be used for compliance purposes of capture efficiency testing in regards to the rules and 4 5 regulations. 6 Q. And the response factor would change 7 depending upon the level --8 THE COURT REPORTER: I'm sorry. Ι 9 can't hear you. 10 BY MS. SANGHA: 11 Q. And is it correct that the response 12 factor would change depending on which specific 13 ink was used and what the volatile organic 14 material percent was for that ink? 15 Α. It would change based upon the 16 organic compounds in that ink, yes. 17 0. And there is a great deal of variability in the organic -- level of organic 18 19 compounds in various inks? 20 Α. According to the chart in 21 Exhibit 13, Appendix D, there is a quite large variability of the organic compounds in the 22 23 different types of inks that are there. So, yes, 24 that would greatly affect the input value of the

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1 organic compounds.

Q. And we don't have information about the inks that were used in this informal test, correct?

5 Α. No. I do not have any information. 6 So if it's true that the ink 0. 7 suggested by Trzupek earlier today -- I think he 8 referenced that -- if it was acetate, this number 9 might be more accurate, but is it possible if 10 there was a different ink the number could be --11 those assumptions would no longer apply?

A. Those generic assumptions would not apply. Again, we would have to know the exact ink, the exact organics that were used to make an accurate determination of the true input value of the organics being used at the time of the test.

Q. So it affects the reliability of the test results?

¹⁹ A. Absolutely.

Q. Mr. Mattison, is there any other additional comment that you would like to make about your opinions that you have set forth in subpoint D? We got into that just a little bit in the testimony a minute ago.

Page 303 1 Α. You are right. You know, I think I 2 may have blurred C, D and potentially E all 3 together, but with regards to D, again, you know, 4 if we have an improper or inaccurate amount of 5 organic material going to the control system, now 6 we have inflated our inlet number, and to 7 determine the destruction efficiency, we take our 8 inlet minus our outlet divided by our inlet and 9 then we times that by 100 to come up with our 10 destruction efficiency. 11 So if we inflate by improperly 12 documenting what the true inlet organic material was going to the control, we would show a higher 13 14 destruction efficiency than what is really there. 15 0. So having a proper inlet point is a 16 very important part for the reliability of the 17 data?

¹⁸ A. Absolutely.

Q. If we could turn to the next page, and you can describe for me the point that your are making in subpoint E and how that supports your overall conclusion about your opinions for the test.

A. As we have heard today, the cost of

actually doing a test is actually probably 1 2 insurmountable to the amount of cost that we have 3 spent here just today alone. And there was a 4 statement in there that Mr. Trzupek believed that 5 the measurement of capture efficiency was 6 expensive, time-consuming, and neither he, nor 7 Packaging Personified finds that investment in 8 time and in cost justified. 9 You know, unfortunately it does 10 cost money to do business, and it does cost money 11 to document and prove compliance so that we can 12 ensure that the environment does not see a degrade 13 in the standards. 14 And if we could turn your attention Q.

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¹¹ Q. And II we could turn your attention ¹⁵ now to subpoint F, and describe for me what point ¹⁶ you are making there and how it affects your ¹⁷ opinion about the reliability of the data.

18 Α. The point I am making here is that 19 in Mr. Trzupek's expert report in 2009 he makes a 20 statement that the VOM destruction efficiency of 21 the drying oven exceeds 99 percent. However, in 22 his own report, engineering report and informal 23 test of December 12, 2001, he only reports the 24 destruction efficiency of 93.6 percent. I don't

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1	see how over time without any additional formal
2	testing did we increase it by 5.4 percent.
3	Q. So once you have run a test and you
4	have a result, that's the result?
5	A. If you do a formal test that meets
6	all the statistical calculations and you perform
7	it in accordance with the rules and regulations to
8	come up with a valid number, that number stays
9	until proven otherwise by another stack test
10	that's valid.
11	Q. And I have another question for you.
12	Mr. Mattison, related to informal test, is there
13	any information that you would normally have
14	received and I think you referenced or noted
15	this earlier that you would normally have
16	received with an emissions test that you did not
17	receive with this communication, and if you could
18	comment on why that's important?
19	A. Well, in a formal test we would have
20	received, as I indicated earlier, all the raw
21	data. We would have been able to verify where the
22	actual test was conducted at. We would have been
23	able to verify that it did meet the method 1
24	criteria. We would have been able to verify that

Page 306 the calibrations of the FID were proper. 1 2 All we have is concentration of 3 2000 PPM at the inlet and 380 PPM at the outlet. 4 That's all I have. I have no supporting 5 documentation of how that was derived or obtained 6 by this report. 7 Ο. And if you had that documentation, 8 for example, and you just referenced the 2000 and 9 380, is that something you would have gone to to 10 check to be able to review and determine whether 11 or not these numbers were accurate? 12 Α. We would have been able to do Yes. 13 that. 14 I would also like to point out 15 on page 2 of that document, second paragraph, it 16 indicates that the testing was conducted for approximately 30 minutes at each location. 17 So an 18 actual test was not an hour long, as indicated earlier in testimony. 19 20 Ο. Thank you, Mr. Mattison. 21 Is there anything else that you 22 would like to point out about your opinion or the 23 informal test? 24 Α. Informal testing has never been

Page 307 used, to my knowledge, to document compliance for 1 2 purposes of permitting, and informal testing like 3 this is not valid or statistically valid to 4 document compliance. 5 Ο. So in your opinion, this test 6 methodology used by Rich Trzupek -- for the 7 purposes of demonstrating compliance you would 8 consider this a novel test methodology? 9 Α. That is correct. 10 0. And would you consider these 11 informal test results to be an accurate estimate 12 of capture and control on press 5? 13 Α. I would not. 14 0. Would you ever rely on these results 15 at the agency as evidence of a facility within 16 compliance of part 218 of the Board regulations? 17 Α. No, I would not. 18 MS. SANGHA: I have no further 19 questions. 20 HEARING OFFICER HALLORAN: Thank 21 you, Ms. Sangha. Mr. Harsch? 22 CROSS-EXAMINATION 23 BY MR. HARSCH: 24 0. What's your engineering degree in?

Page 308 1 Α. Ceramic engineering, sir. 2 0. Have you ever personally performed a 3 stack test? 4 I have not personally performed a Α. 5 stack test. I have conducted a certification for 6 USEPA Method 9. 7 I am familiar with what you do for a Ο. 8 living as we have talked about earlier. But you 9 personally have not performed a test? 10 Α. No. 11 Have you personally witnessed tests Ο. 12 that have been performed previously by 13 Mr. Trzupek? 14 Α. Yes, I have. 15 Okay. And how did you find those Q. 16 tests to be performed? 17 Α. That was many years ago. 18 HEARING OFFICER HALLORAN: 19 Mr. Harsch, can you turn on your mike, please? Ι 20 am having trouble hearing you. Sorry. 21 BY THE WITNESS: 22 Α. That was many years ago that I have 23 actually witnessed Mr. Trzupek actually being the 24 stack tester. I am going back 15, 20 years. Ι

Page 309 don't have specific recollection as to the dates, 1 2 times and sources. 3 BY MR. HARSCH: 4 0. That was when you were just starting 5 out observing stack tests, wasn't it? 6 Α. Yes. 7 Ο. Have you witnessed any stack tests that Mr. Trzupek has oversaw or arranged for his 8 9 clients now that he is no longer actually doing 10 stack testing? 11 Α. I am sure I have. 12 0. Are you aware of any reason to 13 question any of the -- of his -- of those stack 14 tests that he has arranged for? 15 Α. Have I had any questions about --16 0. Any reason to -- any knowledge or 17 any reason to question any of the testing that he 18 has done or overseen? 19 Α. I mean, we view the data as it No. 20 comes in. 21 All of your criticisms that you have 0. 22 testified to at length here, I believe you have 23 qualified as -- as not showing -- as not being --24 Α. Statistically --

Page 310 1 Ο. -- proper to show compliance -- to 2 demonstrate compliance with the regulation? 3 Α. That is correct. 4 You were here when Mr. Trzupek Ο. 5 testified that that was not the purpose of the 6 test? 7 That is correct, at the time. Α. But it appears it is being used for that case now. 8 9 Q. Drawing your attention to 10 Complainant's Exhibit 15. Did you draft this 11 document? 12 Α. I did not draft this exact piece of 13 paper. This is a summary of what I provided. 14 Were you asked to prepare an expert Ο. 15 report in this case? 16 Α. I don't believe I was asked to 17 prepare an expert report. 18 Q. What document did you prepare in 19 this case? 20 An evaluation of the informal stack Α. 21 test. 22 Q. Did the Attorney General's Office give you any information as to why they prepared a 23 24 summary based on what you had given them and

Page 311 introduced their summary into this instead of your 1 2 report? 3 Α. No. 4 Had you seen this document before Q. 5 today? 6 Α. Yes, I have. 7 0. When was it provided to you? 8 I don't recall the exact timeframe Α. it was provided to me. 9 10 Q. This year? 11 Α. Yes. 12 Q. Last year? 13 It was probably after my deposition Α. in November. I can't recall the exact date. 1415 Q. Do you remember the date of your 16 deposition? 17 Α. No. 18 Ο. Do you remember where it occurred? 19 Α. No. 20 Q. Do you remember who took the 21 deposition? 22 I am going to object. MS. SANGHA: I think he said deposition. He meant to say his 23 meeting within our office when we went through his 24

Page 312 1 opinions about the test. 2 MR. GRANT: He hasn't been deposed. 3 MR. HARSCH: I'm sorry but I was --4 MS. SANGHA: It's fair. It's fair. 5 He said deposition and if there had been one, 6 that's something you would want to know. He has 7 not been deposed. We had -- it probably felt like 8 a deposition, as we grilled him about his thoughts 9 and opinions and then had him provide to us 10 something better than our scrawled notes. That's 11 the time that he is referencing. 12 BY MR. HARSCH: 13 Ο. You previously just testified about 14 a deposition in this matter, correct? 15 Α. Yes, I did. Obviously, I was 16 incorrect. 17 Ο. Do you know if the agency has relied 18 upon Mr. Trzupek's engineering estimate for 19 purposes of calculating the cost of the ERMS 20 emissions allowances? 21 Α. I'm not aware of that personally. 22 You were originally provided a copy 0. of this engineering analysis, is that correct, 23 24 when it was submitted to the State?

Page 313 1 Are you referring to the summary Α. 2 report? 3 Ο. Yes. 4 Α. Yes. I was originally given a copy 5 Obviously, I was cc'd on that, yes. of that. 6 Q. Do you recall when you first 7 notified Mr. Trzupek that you found it to be 8 unacceptable? 9 I said I was in receipt of it. Α. Ι 10 did not say I reviewed it at the time. 11 Q. Did you ever notify Mr. Trzupek that you found it to be unacceptable? 12 13 I personally did not do that, no. Α. 14 Q. Did you ever communicate prior to 15 whatever report you gave to the Attorney General's 16 Office that you found this engineering stack test 17 to be unacceptable? 18 Α. No, because it wasn't reviewed until 19 that time. 20 So you have had this since Q. 21 March 31st, 2003? 22 Α. Sure. 23 Q. And ten years later or nine years 24 later you reviewed it?

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1	HEARING OFFICER HALLORAN: I'm
2	sorry. I didn't hear you, Mr. Harsch.
3	BY MR. HARSCH:
4	Q. Nine or ten years later you reviewed
5	it?
6	A. There are many stack tests done in
7	the State of Illinois. I am only one person. I
8	can't get to them all in a timely fashion.
9	Q. Have you reviewed the stack tests
10	engineering stack tests prior to the last hearing
11	in this matter?
12	A. Prior to when?
13	MR. GRANT: I don't think he knows
14	when the hearing was. Why don't you give him a
15	date?
16	MS. SANGHA: He wasn't involved.
17	BY THE WITNESS:
18	A. When I was here today you mentioned
19	2009, but I was not involved in those hearings at
20	all.
21	BY MR. HARSCH:
22	Q. You did not review it prior to the
23	last hearing in 2009?
24	A. I was not aware of it at that time,
1	

20200

Page 315 1 no. 2 MR. HARSCH: Mr. Hearing Officer, I 3 am going to move to exclude Complainant's 4 Exhibit 15. It was not prepared by the witness. 5 He has prepared a report evidently that the 6 Attorney General has provided summary of or 7 something rather than the document in question 8 that he prepared. 9 HEARING OFFICER HALLORAN: 10 Mr. Grant? 11 MR. GRANT: It's sort of an interesting observation considering he used this 12 13 exhibit in his examination of Mr. Trzupek. As 14Mr. Harsch has known since November 15th of 2012, 15 and as I have explained this to him on numerous 16 occasions, these are our 213(f) expert witness 17 disclosures. They were reviewed by Mr. Mattison 18 before -- they were created from some rough things 19 he gave us. They were reviewed by Mr. Mattison 20 and corrected, and they were produced. Rather 21 than ask him to take time out of his schedule to 22 provide an expert witness report like a paid 23 expert might, we prepared Exhibit 15 for use in 24 hearing here and it's taken verbatim from the

¹ 213(f) disclosures.

2 HEARING OFFICER HALLORAN: Okay. Ι have noted both of your objections on the record, 3 4 statements. I am going to allow it in over Mr. Harsch's objection as demonstrative evidence. 5 I think it helps explain Mr. Mattison's verbal 6 7 testimony. So it's admitted. Although, you know, 8 actually the State hasn't even offered it yet, 9 have they? I don't think so. 10 MR. GRANT: I don't know if we have 11 or not. I know that they used it -- we -- yeah. It was one of the things we were going to get to, 12 13 but we might as well now move it into evidence. 14HEARING OFFICER HALLORAN: 15 Complainant's No. 15 is admitted, demonstrative 16 evidence. 17 All right. Mr. Harsch? 18 (Whereupon, COMPLAINANT'S 19 Exhibit No. 15 was admitted 20 into evidence.) 21 MR. HARSCH: That concludes my 22 cross-examination. 23 HEARING OFFICER HALLORAN: Thank 24 you, sir. Ms. Sangha?

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1	REDIRECT EXAMINATION
2	BY MS. SANGHA:
3	Q. Just a few questions.
4	Yes. Mr. Mattison. Mr. Harsch
5	just pointed out this March 31st, 2003, letter.
6	You didn't review this in 2003; is that correct?
7	A. That is correct.
8	Q. Is there any difference in your
9	review now than there would have been in 2003
10	other than additional years of experience in this
11	field?
12	A. No. They would be the same.
13	Q. So your opinions and conclusions in
14	2003 would have been the same as your opinions and
15	conclusions today?
16	A. That is correct.
17	Q. And you have been in this specific
18	field for 20 years; is that correct?
19	A. That is correct.
20	Q. How would you describe your level of
21	knowledge regarding stack testing?
22	A. Thorough.
23	Q. And compliance formal
24	demonstration of compliance and Part 218 aside,

Page 318 just looking at the data and the test results 1 2 here, you wouldn't find this as an accurate estimate of capture and control for any purposes? 3 4 Α. No, I would not. 5 MS. SANGHA: Thank you. No further 6 questions. 7 HEARING OFFICER HALLORAN: Thank 8 you. Mr. Harsch? 9 MR. HARSCH: No further. 10 HEARING OFFICER HALLORAN: Thank 11 you. You may step down, sir. 12 Ms. Sangha, any more witnesses? 13 MS. SANGHA: No. We rest our case. 14 HEARING OFFICER HALLORAN: You rest. 15 Mr. Harsch, any rebuttal? 16 MR. HARSCH: Yes. I will call 17 Mr. Trzupek on rebuttal. 18 HEARING OFFICER HALLORAN: 19 Mr. Trzupek, I remind you that you are still under 20 oath. 21 THE WITNESS: Yes, sir. 22 RICHARD TRZUPEK, 23 re-called as a witness herein, was examined and 24 testified as follows:

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1	DIRECT EXAMINATION
2	BY MR. HARSCH:
3	Q. Mr. Trzupek, you have now had the
4	benefit of listening to Mr. Mattison go through
5	his testimony regarding what has been marked and
6	accepted as Complainant's Exhibit 15. Let's go
7	back through it again.
8	Have you got it open in front of
9	you?
10	A. I do.
11	Q. First off, before we get there, were
12	you ever provided any kind of comments prior to
13	the hearings in this matter regarding your
14	engineering test?
15	A. Not that I recall, no.
16	Q. Did you perform the engineering test
17	for the purpose of demonstrating compliance?
18	A. No, sir.
19	Q. And in response to what's marked as
20	A in this exhibit, I believe Mr. Mattison
21	testified that regarding the statistical
22	analysis issue. Do you agree with him?
23	A. I do not.
24	Q. And why?

Page 320 1 Well, the method 25(a), which is the Α. 2 method that measures the total hydrocarbon 3 concentration, gives the person a real-time 4 readout, a continuous readout of concentrations at 5 a steady state. During a test of this type when 6 we are doing some engineering work, we are looking 7 to make sure that the press is running at a steady 8 state, and then we see how steady the FID readout 9 is, the response. 10 And you can see very quickly and 11 in this case, you know, within a matter of a few 12 minutes how consistent those numbers are going to 13 It's not one number that we are getting over be. 14 that period. It is a continuous stream of data, 15 and if that data is essentially a flatline, I can 16 be very confident that that data is 17 representative. 18 In this printing stack test, would Q. 19 the printing conditions remain the same? 20 Α. Yes. 21 Q. So they would be printing the same 22 product? 23 That is correct. And that's what I Α. 24 directed Mr. Imburgia at the time, to make sure we

Page 321 could get that type of nice, steady state 1 2 condition. 3 0. For engineering purposes, do you 4 believe that the -- your method 25 was, in fact, 5 reliable? 6 25(a), and yes, I do. Α. 7 Q. You heard Mr. Mattison's comments 8 with respect to what's marked as paragraph B? 9 Α. Yes. 10 Do you agree with those comments? 0. 11 Α. I do not. 12 0. And why? 13 Well, with respect to -- again, as I Α. testified earlier today, ink usage is the smaller 14 15 percentage of what is actually used in the 16 flexographic printing. So, for instance, if 17 the -- if they said that their matt's ink usage 18 was 20 pounds, well, then the solvent usage that 19 you add typically with flexo printing would be an 20 additional 40 pounds, for a total of 60. 21 The ink usage -- the ink and 22 solvent usage that I measured to come up with the 23 40 pounds was accurate. I understand that the 24 report is not in the format that Mr. Mattison is

Page 322 1 used to reviewing, and I know he reviews a ton of 2 reports, but in the end, when somebody is 3 reporting usage data, you are relying on the -you are counting on the reliability and the 4 5 integrity of the person who is doing that 6 reporting. 7 40 pounds is what we measured 8 and what I reported, and whether that 40 pounds 9 was delineated in a three-page report or as part 10 of a 200-page stack test report, the State 11 ultimately is counting on the integrity, the 12 honesty and the skill of the person who made those 13 measurements to give accurate data. 14 Q. Is it normal that you would test at 15 100 percent printing application? 16 Α. That is always the big question of 17 printing. We get different answers state to 18 state. 100 percent coverage in printing would 19 lead you to have a completely black sheet of 20 substrate that would be -- that would be 21 worthless. 22 Illinois typically, and to Kevin's credit, looks at printing as -- they look 23 24 for -- I think the word he used is "maximum

Page 323 1 typical." So what -- you know, coverage that gets 2 close to what your maximum normal coverage would 3 be, and that's when we did this particular test 4 what I asked Joe to shoot for. 5 And you heard the comments made with Ο. 6 respect to the efficiency estimates in the rest of 7 that paragraph? 8 Α. Yes. 9 Ο. And do you agree with them? 10 No, I don't. I mean, on two -- and Α. 11 I don't think this is in dispute anymore, and 12 correct me if I'm wrong, but the statement which 13 in reality represented the ink usage rate is just 14 incorrect. The VOM usage rate is the VOM usage 15 rate, which is a combination of solvent and the 16 VOM contained in the ink. So because that is the 17 actual VOM usage rate, then those capture 18 efficiency estimates above 100 are incorrect 19 conclusions. 20 Ο. Any other reasons you disagree with 21 how he testified with respect to B? 22 Α. With respect to B, I guess the only 23 other thing is the VOM content of the ink, the 24 MSDS is a good indicator of VOM content of the

1 inks. Is it as exact as sending it out? It is 2 not. Is the difference between what the MSDS says 3 and a tested content significant for these 4 purposes? I don't believe it is, as a chemist. 5 The other statement, I guess, that was discussed 6 between counsel and Mr. Mattison was, well, the 7 inks vary widely.

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8 When we first started with 9 Packaging, we submitted a list of everything that 10 Packaging had, which I think is -- what I believe 11 is what they were referring to, but in reality, the Sun inks that are used on the solvent presses 12 13 are all extremely similar in composition, a 14mixture of alcohols and acetates and very 15 consistent. And when we did that test, those were 16 the types of inks that were because that's what 17 they run on their solvent presses. And if you 18 look at the Sun inks, you will see that 19 compositions of each one is very similar to the 20 other with small changes across the colors. 21 0. And that would affect the response

²² factor?

A. Correct. And that's why I can be confident about that the response factor would

Page 325 1 have jumped the capture results even higher than 2 we should have. 3 0. And the comment with respect to the 4 acetone, the acetone is used as a solvent and 5 not --6 Α. It was acetate. 7 Ο. Acetate. Excuse me. 8 Α. Yeah. The -- they have a mix that 9 they used as their solvent, and again, remember 10 the solvent is used about two to one over the --11 with respect to the ink. So there is acetates 12 contained in the ink, and then their dilution 13 solvent, which makes up the majority of the VOM 14 emissions are acetates that we know and which have 15 known response factors. 16 Q. What about to respond --17 HEARING OFFICER HALLORAN: 18 Mr. Harsch, can you speak up? 19 BY MR. HARSCH: 20 Can you respond to -- are there any 0. 21 points you want to respond to on what was 22 testified to with respect to paragraph C? 23 Α. Again, we talked about it, you know, 24 as we both said that response factor corrections

Page 326 1 are appropriate. As a chemist, I know that the 2 response factor correction would only increase the 3 measured mass emission rate because of the types 4 of compounds that are used and how FID responds to 5 them. 6 0. And is it also because they are 7 consistent with respect to the standard ink 8 composition? 9 That is correct as well. Α. Yes. 10 Ο. What about with respect -- do you 11 have any other points on that one? If not, you 12 can go to D. 13 Α. Yeah. I have nothing further on C. 14 On D --15 0. D as in dog? 16 Α. D, as in dog. I believe 17 Mr. Mattison said that he believed that the VOM 18 concentrations would be building up and up in the 19 recirculation loop, but this is not, in fact, what 20 we see. We see a steady state condition, a 21 flatline that I described. The measurement at the 22 inlet point did not include the volume of gas 23 going through the recirculation loop, which is why 24 those volumes do not agree. You are only taking a

Page 327 1 side stream off of that loop up through the stack. 2 They basically set -- they have a tee damper that 3 they set in order to do that, to set how much they 4 were going to pull off. 5 And I guess the other thing 6 would be, if you did, indeed, have a build-up of 7 VOM as a result of recirculation, you would 8 eventually hit the lower explosive limit and blow 9 up your oven, and since press 5 is still in one 10 piece, I am assuming that didn't happen. 11 0. Do you believe that you, in fact, 12 tested the points that would show the inlet 13 concentration to the dryer and the exit 14 concentration of the stack? 15 Α. Yes, I do. 16 0. And that would show, would it not, 17 the amount of solvent that was emitted out of it 18 potentially, plus versus what was destroyed by 19 being recirculated? 20 Α. Yes. 21 He has taken issue with respect to Ο. 22 your observations that it was under a negative 23 pressure. Can you respond to that? 24 Α. In two ways. One, the measurement

Page 328 1 of static pressure in a system is about as simple 2 as it gets. It's simply attaching some type of 3 differential pressure gauge, a Magnehelic is most commonly used, and noting the deflection of the 4 5 needle. 6 Static pressures are extremely 7 simple to measure, and we measure them all the 8 time during stack tests, and that was done in this 9 case, and as I observed earlier, if the oven was 10 under positive pressure, and I have been in 11 unbalanced press rooms before, we would -- you 12 would be overwhelmed by the fumes, and that was 13 not the case. 14Ο. Do you agree with his conclusions 15 that -- regarding the flow measurements showed 16 that it was not being maintained -- making it 17 impossible for it to be maintained under negative 18 pressure? 19 Α. I do not. 20 Ο. Is it because he doesn't understand 21 where you were measuring? 22 Α. That's my belief, yes. 23 0. Do you agree with the comments that 24 you biased the destruction efficiency calculations

by inflating the inlet emissions rate to the
control?
A. No, I do not.
Q. Why?
A. Because, again, we did not have any
buildup. We did not have any increase in the
inlet rate. We had a steady definable inlet rate
that was consistent with the amount of ink that
was used and the amount of solvent that was used.
I believe those inlet numbers are reflective of
what was going on in the press as was with the
outlet numbers.
Q. The statements in E have nothing to
do with your informal stack test, did they?
A. They do not.
Q. And do you have a response to the
comments in statement F?
A. Yeah. That's incorrect on my part,
that he is correct. I 99 percent I should not
have put in my expert report. 93.6 is the correct
number.
Q. In fact, you believe you have
corrected that?

Page 330 1 didn't. This case has been going on for a while. 2 0. Do you have any question that from a 3 sound science standpoint that your engineering 4 stack test was reliable? 5 Α. I have no question, no. 6 And based on that engineering stack Ο. 7 test, does it remain your opinion that had a 8 formal stack test been performed on press 5 it 9 would have passed the regulatory requirements of 10 90 percent destruction and 65 percent capture or 11 whatever is specified in the rule? 12 Α. I believe it would have passed on 13 both accounts, yes. 14MR. HARSCH: No further questions. 15 HEARING OFFICER HALLORAN: State? 16 MS. SANGHA: Yes. I have got just a 17 couple questions. 18 CROSS-EXAMINATION 19 BY MS. SANGHA: 20 Ο. Mr. Trzupek, just a couple questions 21 Do you have the raw data to substantiate for you. 22 the 40 pounds of VOM? 23 Α. I do not. 24 Do you have any of the raw data Q.

Page 331 1 available that supports this informal emissions 2 test? 3 I do not. I actually contacted my Α. 4 brother who works at -- still works at Huff & 5 Huff, which is where I was when I did this test to 6 see if they have those data files, but they do 7 not. 8 0. So the data no longer exists, the 9 raw data? 10 As far as I know, it does not, yeah. Α. 11 0. And do you recall the specific ink 12 that you used when you conducted the informal 13 test? 14 I know it was a four-color job. Α. So 15 there were four different Sun inks, but I don't 16 recall the specific ones. 17 And were these test results that 0. 18 were submitted to the agency formally for 19 certification and compliance? 20 Α. No, ma'am. 21 Q. So in that sense, no response would 22 have been required of the agency to these informal 23 test results? 24 Α. I don't know what the agency's

Page 332 1 obligations are for this sort of thing. 2 Q. You never submitted them and 3 requested a response approval of your test 4 results? 5 I did not request approval, no. Α. 6 Ο. And were you aware that the agency 7 didn't find these informal tests to be reliable? 8 Α. I was not. 9 Ο. So in your opinion, you thought that 10 the agency believed that this informal test was a 11 reliable test? You did not know that this test 12 was at issue? 13 I did not until I came up with Α. No. 14 this matter. I mean, we used that number, that 15 destruction number and that capture number in our 16 AERs and retro-filing our ERMS reports, and since 17 those were not questioned, I assumed that the 18 agency was okay with it at the time. 19 Weren't those ERMS reports submitted 0. 20 after the 2004 formal compliance test? 21 Α. They -- the ret -- the old ERMS 22 reports, the retroactive ones? 23 Ο. And I would have to go back to the 24 record for this, but I thought the ERMS reporting,

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the compliance that Packaging did on that were done after the formal test and not after this test?

4 And that may have been. Α. I don't 5 know when they were submitted, but for when we did the retroactive work to determine the annual 6 7 emissions prior to 2002 and what our ERMS 8 emissions were prior to 2002, we used this factor. 9 0. And this would have been the only 10 information that -- even a close guess available 11 as to the possible --12 That's -- that was our Α. Correct. best information. So that's what we used in 13 14 developing those documents. 15 MS. SANGHA: No further questions. 16 HEARING OFFICER HALLORAN: Thank 17 Mr. Harsch, any redirect? you. 18 REDIRECT EXAMINATION 19 BY MR. HARSCH: 20 Ο. Those ERMS -- retroactive ERMS 21 applications were what they billed Packaging for? 22 Α. That's my understanding, yes. 23 MR. HARSCH: No further. 24 HEARING OFFICER HALLORAN:

Page 334 1 Ms. Sangha? 2 RECROSS-EXAMINATION 3 BY MS. SANGHA: 4 Ο. Did you have a follow-up with the 5 agency to ask them about the data that went into 6 that ERMS reports? 7 Α. I did not. 8 0. Is it possible that there could have 9 been some confusion about the numbers that you 10 submitted and where those came from? 11 Α. I guess that is possible. 12 MS. SANGHA: No further questions. 13 HEARING OFFICER HALLORAN: Mr. 14 Harsch? 15 MR. HARSCH: None. 16 HEARING OFFICER HALLORAN: 17 Mr. Trzupek, you may step down again. Thank you. 18 We will go off the record. 19 (Whereupon, a discussion was had 20 off the record.) 21 MR. HARSCH: I did want to just 22 state for the record that I wanted to thank 23 you for -- and my client would like to thank you for arranging with the City of Elmhurst that we 24
Page 335 1 could continue the hearing today and complete it. 2 Thank you. 3 HEARING OFFICER HALLORAN: I agree. 4 They have been stupendous. Thank you. Let's qo 5 off the record. 6 (Whereupon, a discussion was had 7 off the record.) 8 HEARING OFFICER HALLORAN: We were 9 off the record talking about the post-hearing 10 briefing schedule, and based on our tight 11 schedule, I concluded by the contract the 12 transcript should be in, filed with the Board by 13 May 31st, but it may not be posted until June 3rd. 14 So if we started from that date, with that said, 15 Packaging Personified's opening brief is due on or 16 before June 12th. The State's post-hearing brief 17 is due on or before June 24th. Packaging's reply, 18 if any, is due on or before July 3rd, and the 19 parties have -- or mentioned to me that they will 20 serve electronically on the due dates, and that 21 was the agreement. 22 With that said, I do acknowledge 23 this is a very difficult subject matter, and I 24 appreciate it. I learned a lot today. And it's

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Page 337 1 I, KARI WIEDENHAUPT, do hereby certify that 2 the foregoing was reported by stenographic and 3 mechanical means, which matter was held on the 4 date, and at the time and place set out on the title page hereof and that the foregoing 5 6 constitutes a true and accurate transcript of 7 same. 8 I further certify that I am not related to 9 any of the parties, nor am I an employee of or 10 related to any of the attorneys representing the parties, and I have no financial interest in the 11 12 outcome of this matter. 13 I have hereunder subscribed my hand on the 14 31st day of May 2013. 15 16 17 18 19 Uni Wielendint 20 21 KARI WIEDENHAUPT, CSR 22 23 24

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