UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of

Tronox Limited et al.

OFFICE OF ADMINISTRATIVE LAW JUDGES

OFFICE OFFICE OF ADMINISTRATIVE LAW JUDGES

OFFICE OFF

NON-PARTY ISHIHARA CORPORATION (U.S.A.)'S MOTION FOR IN CAMERA TREATMENT OF PROPOSED EVIDENCE

Ishihara Corporation (U.S.A.) ("ICUSA") is not a party to the above-captioned matter. Pursuant to Rule 3.45 of the Federal Trade Commission's Rules of Practice, 16 C.F.R. § 3.45(b), ICUSA respectfully requests that this Court grant *in camera* treatment of several documents that Complaint Counsel and Tronox Limited ("Tronox") have designated for inclusion into evidence in the administrative trial of this matter. ICUSA produced these documents in response to subpoenas in this matter for both Complaint Counsel and Tronox. ICUSA seeks *in camera* treatment for the following documents:

Complete Non-Disclosure *in camera* treatment is sought for the following documents, attached hereto as Exhibits B, C, and D:

Exhibit No.	Beg. Bates Label	End Bates Label
PX3049	ISH 0001	ISH 0001
PX3050	ISH 0002	ISH 0002
PX3051	ISH 0003	ISH 0003

Partial Non-Disclosure *in camera* treatment is sought for the following document, a list of the redactions is included below and highlighted in attached Exhibit E:

Exhibit No.	Beg. Bates Label	End Bates Label
PX7028	PX7028-001	PX7028-061

The excerpts that ICUSA requests in camera treatment are as follows:

13:1-14:11; 15:1-3, 11, 18-22; 16:3; 17:22-24; 20:10-17; 21:9-15; 23:7-18; 24:5-25:5; 25:11-18; 26:24-28:11; 28:17-30:13; 37:17-38:9; 41:17; 44:9, 11, 15-45:13; 45:20-46:20; 47:10-48:6; 48:13, 25-49:7; 49:13-50:8; 50:10; 52:2; 53:5-12, 15; 54:3, 11, 15, 21; 55:4, 7-8, 10, 17; 56:11-15; 57:11-15; 58:7-9; 60:5-6, 10-16; 65:16-17; 67:16-22; 68:3-23; 71:1-5; 73:4-12; 75:6-77:14; 83:20-21, 24-84:1; 84:15-21, 23, 25; 85:6, 8-11; 87:1, 5-9, 15-21, 23; 88:1-8, 12-89:16; 89:25-90:25; 94:10-11, 13-14, 16, 23-24; 95:1-2, 8-10, 19-96:10; 96:16-18; 98:14-22; 99:3, 4-6, 8-11, 13, 16-20, 25; 100:1, 4-101:12; 101:23-24; 102:1-8; 103:2-3, 12, 14-15, 18-20; 104:6-7, 12-13, 18, 22-24; 106:11-15; 107:20-21, 24; 108:3,7-8, 12-17, 21-25; 109:13-14; 110:10-11, 23-112:9; 113:24-114:25; 115:20-25; 116:1-117:5; 118:4, 10-11; 119:24-122:17; 128:5-7, 18-22; 131:23-133:10; 134:8-22; 135:1-3, 9-25; 136:2-3, 5, 8-22; 137:6-139:8; 139:10-13, 22-140:8; 140:24-25; 141:2; 142:2-8, 12-15; 144:23-146:6; 147:1-6; 149:1-4; 150:4, 12-15; 151:2-153:2; PX7028-042, 108, 135; PX7028-043-060.

Consistent with Rule 3.45(e), ICUSA has conspicuously marked the above excerpts by highlighting the relevant text. ICUSA will provide a redacted version of Exhibit E (PX7028) within five business days of this motion. The Declaration of Marvin Hosokawa in support of this motion is attached as Exhibit A.

ICUSA'S CONFIDENTIAL DOCUMENTS QUALIFY FOR IN CAMERA TREATMENT UNDER THE FEDERAL TRADE COMMISSION'S RULES OF PRACTICE

ICUSA's documents are entitled to *in camera* treatment under the standards set out in 16 C.F.R. § 3.45(b). That section provides for *in camera* treatment of certain business-related information where public disclosure of the document in question "will result in a clearly defined, serious injury to the . . . corporation requesting in camera treatment." *Id.* The requisite showing can be made by establishing that the document or information in question is "sufficiently secret and sufficiently material to the applicant's business that disclosure would result in serious

competitive injury." *In re Dura Lube Corp.*, 1999 F.T.C. LEXIS 255, *6 (Dec. 23, 1999) (quoting *General Foods Corp.*, 95 FTC 352, 355 (1980)). In this context, "the courts have generally attempted to protect confidential business information from unnecessary airing." *H.P. Hood & Sons, Inc.*, 58 F.T.C. 1184, 1188 (1961).

Previous cases have identified six factors to be weighed in determining whether the documents in question are sufficiently secret and sufficiently material that disclosure would result in serious competitive injury:

(1) the extent to which the information is known outside of the applicant's business; (2) the extent to which the information is known by employees and others involved in the applicant's business; (3) the extent of measures taken by the applicant to guard the secrecy of the information; (4) the value of the information to the applicant and its competitors; (5) the amount of effort or money expended by the applicant in developing the information; and (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

Dura Lube, 1999 F.T.C. LEXIS 255 at *6-*7 (quoting Bristol-Myers Co., 90 F.T.C. 455, 456 (1977)).

PUBLIC DISCLOSURE OF ICUSA'S CONFIDENTIAL INFORMATION WOULD RESULT IN SERIOUS COMPETITIVE INJURY TO ICUSA

ICUSA's documents meet the standards for secrecy and materiality necessary to justify *in camera* treatment. Documents PX3049, PX3050, and PX3051 (attached hereto as Exhibits B, C, and D, respectively), contain confidential sales and customer information of ICUSA which was compiled in response to subpoenas issued by both Complainant and Respondents in this action and designated "Confidential" under the terms of the Protective Order. The deposition transcript of ICUSA's Vice President of Marketing (PX7028, attached hereto as Exhibit E) contains numerous confidential insights into the operations and strategies of ICUSA and its affiliates. ICUSA has requested that only specific transcript excerpts be kept confidential, as listed above and marked in highlighting in the attached Exhibit E.

A. ICUSA Has Preserved the Secrecy of the Documents and Information in Question

ICUSA has taken significant measures to protect the confidentiality of its information. Such information, which is included in Exhibits B, C, D, and throughout E, is only disclosed to a limited number of ICUSA employees and a narrow set of employees at ICUSA's parent company, Ishihara Sangyo Kaisha Ltd. ("ISK"). Exhibit A, Hosokawa Decl. at 3. The information is not disclosed, nor otherwise known, outside of ICUSA or ISK except where, in limited circumstances, disclosure is necessary to engage in contract negotiations with third parties. (*Id.*). The measures adopted by ICUSA to maintain the confidentiality of its information would make it extremely difficult for its competitors or other third parties to obtain access to or duplicate the information contained in the documents at issue. *Id.*

B. Disclosure of the Information Contained in the Documents in Question Would Result in Serious Competitive Injury to ICUSA.

Exhibits B, C, and D contain sensitive sales and customer information, while Exhibit E contains sensitive confidential information about ICUSA's operations, customers, competitive situation, costs, pricing, sales, and production relating titanium dioxide. (Exhibit A, Hosokawa Decl. ¶ at 4). The deposition transcript (Exhibit E) also contains sensitive information reflecting ICUSA's views on competition and its position in the titanium dioxide market. *Id.* The information in Exhibit E includes the identity of ICUSA's customers, its specific sales techniques and contracting methods, its sales volume sales, production capacity, and details about how ICUSA competes for sales. ICUSA has listed the excerpts in Exhibit E that contain confidential information above and marked the excerpts with highlighting in Exhibit E.

Consistent with prior cases, ICUSA has designated only "specific excerpts reflecting confidential information." *In re ECM BioFilms, Inc.*, 2014 FTC LEXIS 189, *9-10 (F.T.C. July 23, 2014).

All of the information for which ICUSA seeks *in camera* protection is highly confidential and commercially sensitive. *Id.* Disclosure of this information would reveal valuable information regarding ICUSA's business operations and strategies in the sale of titanium dioxide, such as information on how pricing decisions are made and how ICUSA competes for sales in the market. *Id.* Disclosure of this information would severely jeopardize ICUSA's ability to negotiate effectively sales of titanium dioxide and could otherwise result in serious damage to ICUSA in the marketplace. *Id.*

C. The Likelihood of Serious Competitive Harm to ICUSA Outweighs the Public Interest in Disclosure of the Documents in Question.

ICUSA deserves "special solicitude" as a non-party to this matter requesting *in camera* treatment for its confidential business information. *In the Matter of Kaiser Aluminum & Chemical Corp.*, 103 F.T.C. 500, 500 (1984) (order directing *in camera* treatment for five-year-old sales statistics of non-parties). Affording *in camera* treatment to the information of non-parties, for reasonable time periods, encourages non-parties such as ICUSA to cooperate with future discovery requests in adjudicative proceedings. *Id.* ICUSA has cooperated with the discovery demands in this case by compiling the information sought by the parties and testifying freely at its deposition. Moreover, "public understanding of this proceeding does not depend on access to" ICUSA's highly confidential information. *Id.* The balance of interests clearly favors *in camera* protection for Exhibits B, C, and D, and partial *in camera* protection for Exhibit E.

D. Protection for ICUSA's Confidential Information Should Extend For 5 Years.

The nature of the highly confidential information contained in Exhibits B, C, D, and Exhibit E warrants lasting protection. Information contained in the documents, including but not limited to, information identifying the customers with whom ICUSA has arrangements for the sale of titanium dioxide, as well as information about ICUSA's sales, costs, supply, and outlook

on the marketplace, is vital to ICUSA's competitive position and business strategy. Accordingly, ICUSA respectfully requests that for Exhibits B, C, and D, be afforded *in camera* protection, and Exhibit E be afforded partial *in camera* protection, for a period of five years.

Respectfully submitted,

/s/ Joseph A. Meckes
Joseph A. Meckes

Attorney for Ishihara Corporation (U.S.A.)

CERTIFICATE OF SERVICE

The undersigned hereby certifies under penalty of perjury that the following is true and correct. On May 4, 2018, I caused to be served the following documents through the Federal Trade Commission's electronic filing system.

- NON-PARTY ISHIHARA CORPORATION (U.S.A.)'S MOTION FOR IN CAMERA TREATMENT OF PROPOSED EVIDENCE (PUBLIC VERSION)
- NOTICE OF APPEARANCE
- [PROPOSED] ORDER

Courtesy copies have been provided to:

The Office of the Secretary: (via electronic mail)
Office of the Secretary
Federal Trade Commission

The Office of the Administrative Law Judge (via electronic mail)
The Honorable D. Michael Chappell
Chief Administrative Law Judge

/s/ Joseph A. Meckes
Joseph A. Meckes

Attorney for Ishihara Corporation (U.S.A.)

STATEMENT REGARDING MEET AND CONFER

The undersigned certifies that counsel for Non-party Ishihara Corporation (U.S.A.)

("ICUSA") notified counsel for the Federal Trade Commission and counsel for Tronox Limited

on April 27, 2018 that it would be seeking complete in camera treatment for Exhibits PX3049,

PX3050, PX3051, and shared with counsel for both parties the redacted version of PX7028 for

which ICUSA was going to seek partial in camera treatment. Counsel for the Federal Trade

Commission and counsel for Tronox Limited indicated that they would not object to ICUSA's

motion.

Dated: May 4, 2018

/s/ Joseph A. Meckes

Joseph A. Meckes

Attorney for Ishihara Corporation (U.S.A.)

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UNITED STATES OF AMERICA FEDERAL TRADE COMMISSION OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of)	
Tronox Limited et al.)	Docket No. 9377
)	
)	

PROPOSED ORDER

On May 1, 2018, Non-Party Ishihara Corporation (U.S.A.) ("ICUSA") filed a motion for *in camera* treatment of confidential business information contained in various documents that have been identified by Complaint Counsel and Tronox Limited as potential exhibits.

IT IS HEREBY ORDERED that ICUSA's Motion is GRANTED. The information set forth in ICUSA's exhibits numbered as Exhibits B, C, and D will be subject to *in camera* treatment, and Exhibit E will be subject to partial *in camera* treatment, under 16 C.F.R. § 3.45 and will be kept confidential and not placed on the public record of this proceeding for a period of five years.

- Exhibit B: PX3049.
- Exhibit C: PX3050.
- Exhibit D: PX3051.
- Exhibit E: PX7028, redacted

IT IS FURTHER ORDERED that a redacted version of PX7028, as supplied by ICUSA, will be the version of PX7028 on the public record of this proceeding.

IT IS FURTHER ORDERED that only authorized Federal Trade Commission personnel, and court personnel concerned with judicial review may have access to the above-referenced information, provided that I, the commission, and reviewing courts may disclose such *in camera* information to the extent necessary for the proper disposition of the proceeding.

	ORDERED:
	D. Michael Chappell Administrative Law Judge
DATED:	

EXHIBIT A

Declaration of Marvin Hosokawa

UNITED STATES OF AMERICA FEDERAL TRADE COMMISSION OFFICE OF ADMINISTRATIVE LAW JUDGES

In the Matter of)	
Tronox Limited et al.)	Docket No. 9377
))	
)	

DECLARATION OF MARVIN HOSOKAWA IN SUPPORT OF NON-PARTY ISHIHARA CORPORATION (USA)'S MOTION FOR IN CAMERA TREATMENT OF PROPOSED EVIDENCE

I, Marvin Hosokawa, declare as follows:

- 1. I am currently President and CEO of Ishihara Corporation (U.S.A.) ("ICUSA"). I have reviewed and am familiar with the documents ICUSA produced in the above-captioned matter in response to subpoenas for the same content from both the Federal Trade Commission and Tronox Limited.
- 2. I have reviewed the documents for which ICUSA seeks *in camera* treatment. As President and CEO of ICUSA, I am familiar with the confidential information contained in the documents at issue. Based upon my review of the documents, my knowledge of ICUSA's business, and my familiarity with the confidentiality protections afforded this type of information by ICUSA, it is my belief that disclosure of these documents would cause serious competitive injury to ICUSA.

- 3. ICUSA has taken significant measures to protect the confidentiality of its information. The information contained in Exhibits B, C, D, and E is only disclosed to a limited number of ICUSA employees and a limited number of employees from its Japanese parent company, Ishihara Sangyo Kaisha, Ltd. ("ISK"). The information is not disclosed, nor otherwise known, outside of ICUSA and ISK except where the information relates to or arises from a confidential business relationship with a third party. The measures adopted by ICUSA to maintain the confidentiality of its information would make it extremely difficult for its competitors or other third parties to obtain access to or duplicate the information contained in the documents at issue.
- 4. Exhibits B, C, and D are charts showing our sales figures and customer lists for certain products. The excerpts in Exhibit E contain the various confidential business information: ICUSA's product capabilities in the United States, its sales strategy and outlook in the United States and North America, including its sales breakdown by region and sales channels, how sales contracts are negotiated and the type of agreements and contracting practices it uses with customers; ICUSA's customer names and relationships, the types of purchases made by customers with ICUSA, how and why ICUSA has won or lost customers in the United States and to whom such sales were won or lost; who ICUSA considers its primary competition for each customer and/or product type; ICUSA's operational details, including its relative size, number of employees, its employees roles and responsibilities, the cost structure of its business, and its pricing and contracting processes; and ICUSA's supply information based on its knowledge of the production details of its parent, ISK, including the capacities of its facilities, supply and demand constraints, the titanium dioxide production abilities and capacity at each facility relative to ICUSA's overall demand. All of this information is confidential and

commercially sensitive. Disclosure of this information would reveal valuable information regarding ICUSA's business operations and strategies for the sale of titanium dioxide, as well as could be used to determine the pricing and other competitively sensitive terms of ICUSA's arrangements for the sale of titanium dioxide. Disclosure of this information would severely jeopardize ICUSA's ability to negotiate effectively for the sale of titanium dioxide and could otherwise result in serious damage to ICUSA in the marketplace.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on April 30, 2018.

Marvin Hosokawa

EXHIBIT B

PX3049

(Confidential - Not Included in the Public Version)

EXHIBIT C

PX3050

(Confidential - Not Included in the Public Version)

EXHIBIT D

PX3051

(Confidential - Not Included in the Public Version)

EXHIBIT E

PX7028

(Confidential – Redactions in the Public Version)

In the Matter of:

Tronox and Cristal

March 21, 2018 David Duenwald

Condensed Transcript with Word Index



For The Record, Inc. (301) 870-8025 - www.ftrinc.net - (800) 921-5555

Duenwald

Tronox and Cristal 3/21/2018

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1	UNITED STATES OF AMERICA	1	APPEARANCES (Continued)	
2	FEDERAL TRADE COMMISSION	2	Also Present:	
3	OFFICE OF THE ADMINISTRATIVE LAW JUDGE	3	Kasey T. Ingram, General Counsel Compliance Officer	and Chief
5	TRONOX LIMITED, a Corporation,	4	ISK Americas Incorporated	
6	and File No.	5	Ken Reeser, Videographer	
7	CRISTAL USA, INC., a Corporation. D09377	6	Reir Reeber, Videographer	
8	chibian oba, inc., a corporation. bossiii	7		
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11	CONTAINS HIGHLY CONFIDENTIAL TESTIMONY	10		
12	Videotaped Deposition of	11		
13	DAVID DUENWALD	12		
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17		16		
18	Reported by:	17		
	LEIGH ANN OROZCO, CSR No. 7607	18		
19		19		
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4	WESTERN REGION - SAN FRANCISCO	5	BY MR. EDMONDSON	80, 150
_	By: Eric D. Edmondson, Esq.	6		
5	901 Market Street, Suite 570 San Francisco, California 94103	7	000	
6	(415) 848-5179	8 9	EXHIBITS DEPOSITION OF DAVID DUENWAL	n
7	Eedmondson@ftc.gov	10	Wednesday, March 21, 2018	
8	For TRONOX LIMITED:	11	EXHIBITS DESCRIPTION	PAGE
9	KIRKLAND & ELLIS LLP By: Andrew Pruitt, Esq.	12	Ex 1 Document entitled "TiO2	21
10	Don Hong, Esq.	12	Pigment Annual Review, A Review of 2014"; 156 pages	
11	655 Fifteenth Street, Northwest Washington, D.C. 20005	13 14	Ex 2 Document entitled "TiO2	26
	(202) 879-5000	''	Pigment Annual Review";	-
12	Andrew.pruitt@kirkland.com Don.hong@kirkland.com	15	253 pages	
13		16	Ex 3 Ishihara Corporation (USA)	33
14 15	For CRISTAL USA INC.: ARNOLD & PORTER KAYE SCHOLER LLP	17	Summary of Sales of Selected TiO2 Grades 2015, Bates ISH	
	By: Albert Teng, Esq. (Telephonic)	1/	0001, CONFIDENTIAL FTC DOCKE	Г
16	601 Massachusetts Avenue, Northwest Washington, D.C. 20001-3743	18	No. 9377; 1 page	
17	(202) 942-6778	19	Ex 4 Ishihara Corporation (USA)	33
18	Albert.teng@apks.com	20	Summary of Sales of Selected TiO2 Grades 2016, Bates ISH	
19	For the Deponent:	20	0002, CONFIDENTIAL FTC DOCKE	Г
20	SQUIRE PATTON BOGGS BY: Joseph A. Meckes, Esq.	21	No. 9377; 1 page	
21	275 Battery Street, Suite 2600	22	Ex 5 Ishihara Corporation (USA)	33
22	San Francisco, California 94111 (415) 954-0201	22	Summary of Sales of Selected	
44	Joseph.meckes@squirepb.com	23	TiO2 Grades 2017, Bates ISH 0003, CONFIDENTIAL FTC DOCKE	r
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1	EXHIBITS (Continued)	1	275 Battery Street, Suite 2600, San Francisco,
2	DEPOSITION OF DAVID DUENWALD	2	California, and was noticed by Andrew Pruitt of
3 4	Wednesday, March 21, 2018	3	Kirkland & Ellis.
5	Exhibit Description Page	4	The court reporter today is Leigh Ann Orozco
6	Ex 6 Fibre2Fashion.com print story 73	5	of For The Record.
U	dated 8/13/13; 1 page	6	Counsel, please identify yourselves and
7	dated 6/15/15, 1 page	7	state whom you represent.
8		8	MR. PRUITT: Andrew Pruitt, Kirkland &
9	000	9	Ellis, for Tronox.
10		10	MR. HONG: Don Hong from Kirkland & Ellis
11		11	for Tronox Limited.
12		12	MR. EDMONDSON: Eric Edmondson, Federal
13		13	Trade Commission.
14		14	MR. TENG: Albert Teng from Arnold & Porter
15		15	on behalf of the Cristal respondents.
16		16	MR. INGRAM: Kasey Ingram, general counsel
17		17	of Ishihara Corporation USA.
18		18	MR. MECKES: Joe Meckes, Squire Patton
19		19	Boggs, for the witness.
20		20	THE VIDEOGRAPHER: Thank you.
21		21	If there are no stipulations, the reporter
22		22	may administer the affirmation.
23		23	THE REPORTER: Mr. Duenwald, would you raise
24		24	your right hand, please?
25		25	Do you solemnly state that the testimony you
	6		8
1	BE IT REMEMBERED that on Wednesday, March 21,	1	are about to give in this matter will be the truth,
2	2018, commencing at the hour of 9:05 a m., in the LAW	2	the whole truth, and nothing but the truth, so help
3	OFFICES OF SQUIRE PATTON BOGGS, LLP, 275 Battery	3	you God?
4	Street, Suite 2600, San Francisco, California, before	4	THE WITNESS: Yes.
5	me, LEIGH ANN OROZCO, a Certified Shorthand Reporter	5	THE REPORTER: Thank you.
6	in and for the State of California, personally	6	EXAMINATION
7	appeared	7	BY MR. PRUITT:
8	DAVID DUENWALD,	8	Q. Good morning, Mr. Duenwald.
9	called as a witness herein, who, having been duly	9	A. Good morning.
10	sworn, was thereupon examined and testified as	10	Q. Could you please state and spell your full
11	hereinafter set forth.	11	name for the record?
12		12	A. Yeah, David Duenwald. And D-a-v-i-d
13	000	13	D-u-e-n-w-a-l-d.
14	THE VIDEOGRAPHER: Good morning. This is	14	Q. Okay. Thank you.
15	the beginning of DVD Number 1 of Volume 1 in the	15	Have you ever given a deposition before?
16	deposition of David Duenwald in the matter of Tronox	16	A. This is the first one.
17	Limited versus Cristal USA Inc. in the US Federal	17	Q. All right. So we will cover some ground
18	Trade Commission, Office of the Administrative Law	18	rules. You may have already heard some of this from
19	Judge, File Number D09377.	19	your attorneys, but you understand that today I'll be
20	Today's date is March 21st, 2018. The time	20	asking you questions and you have to give verbal
21	is 9:05 a m.	21	responses?
22	The videographer today is Ken Reeser	22	A. Yes.
		1 22	
23	representing For The Record, Inc., 10760 Demarr Road,	23	Q. If you don't understand my question, will
	representing For The Record, Inc., 10760 Demarr Road, White Plains, Maryland.	23 24	you please let me know?
23			

2 (Pages 5 to 8)

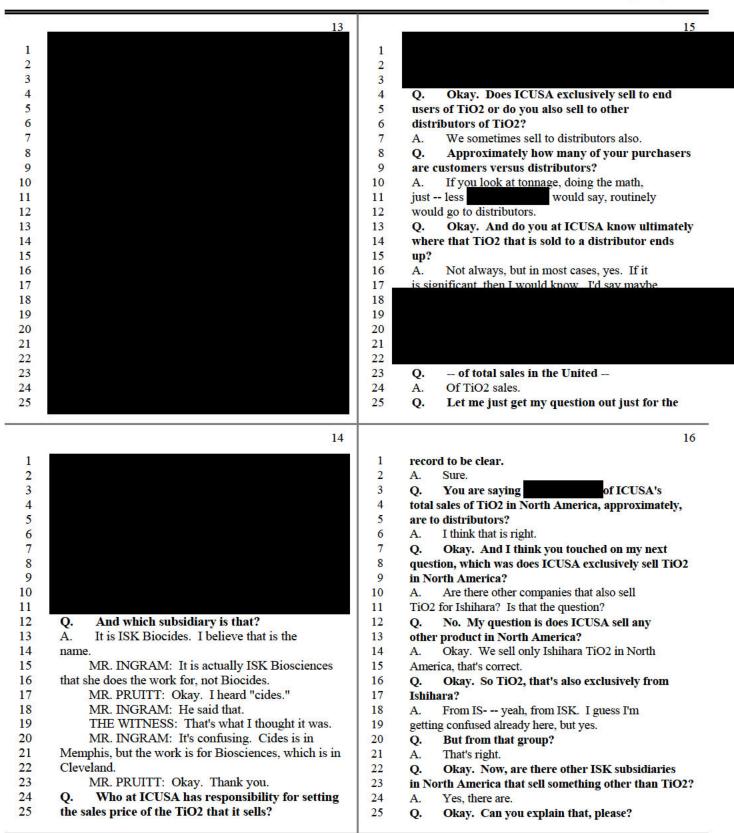
Duenwald

Tronox and Cristal 3/21/2018

9 11 1 Yeah, I'll try to keep it in mind. There 1 Do you understand you can take a break 2 2 anytime today as long as there is not a question may be some confusion. When I hear Ishihara, 3 3 sometimes I'm thinking of only our own subsidiary pending? 4 4 here. But I'll try to keep it in mind. If you can A. Yes. 5 5 remind me too if I get off. Q. And of course you understand you are under MR. MECKES: We'll do our best. 6 6 oath today? 7 Yes, I do. 7 Q. BY MR. PRUITT: Yeah, we'll do our best. A. 8 8 Is there any reason why you cannot give Q. A. Okav, thanks. 9 And of course if at any point you are 9 full, accurate and truthful testimony today? O. 10 10 confused, please let me know and I will be happy to A. 11 Q. All right. Your employer is Ishihara 11 clarify. 12 Corporation USA; is that right? 12 A. Okay, thanks. 13 Okay. Mr. Duenwald, you are currently the 13 That's right. O. A. Does it go by ICUSA? 14 Q. 14 vice president of marketing at ICUSA; is that right? 15 A. ICUSA. 15 That's correct. ICUSA. You have been at ICUSA for almost 33 years? 16 O. 16 Q. 17 Or Ishihara. 17 A. Yes, that's right. A. 18 18 So if I want to refer to ICUSA, should I use Q. Have you held any other positions during 19 that term or should I say something else? 19 vour time at ICUSA? 20 Ishihara might be easier to get out, 20 Different titles, but I have had the same depending on your Japanese familiarity. 21 21 job basically for the 33 years. THE VIDEOGRAPHER: Mr. Duenwald, could I 22 And what have been your responsibilities 22 23 23 have you move your water bottle to one side or the over that period? 24 other? 24 Sales of Ishihara's pigment products in A. 25 25 MR. MECKES: And if it helps, Andrew, if you North America. 10 12 1 want to refer to the parent company, you can call 1 O. And what do you mean by sales? 2 2 A. Exchanging goods for money. I don't know them ISK. 3 3 BY MR. PRUITT: That works for me if that what you mean exactly. Ο. 4 Sure. What I mean is what do you mean your 4 works for you. 5 Yeah, that's how we usually refer to it. 5 responsibilities are with respect to sales? ISK is the whole entity, I guess, of the parent and Oh, I see. I call on customers and make 6 arrangements for basically general agreements for 7 subsidiaries. 8 supply of titanium dioxide to customers in mostly the 8 Okay. Now, if I want to refer to the parent Q. 9 United States. Some outside the United States but 9 and the subsidiaries collectively, what term should I 10 10 use? all of North America. 11 ISK Group, probably, if that sounds good to 11 Okay. So then your job responsibilities are A. 12 with respect to sales limited to North America; is 12 you. 13 Okay. And you will understand that to refer 13 that right? 14 to ISK and ICUSA and the other subsidiaries? 14 Yes, that's correct. 15 15 And as part of your responsibilities, do you 16 Q. Tell you what. That's probably going to 16 know where the TiO2 that you arrange for sales, where 17 confuse me now. 17 it is coming from? 18 Yes, I do. 18 I was going to say maybe if you use ISK Japan for our parent company, ISK Group for the whole 19 19 And of course you know where the customer is 20 mob of us, and Ishihara for our US subsidiary. I 20 located who purchases the TiO2? guess that's what I'm used to. 21 21 A. Okay. Here is what I'll propose. I would 22 22 And when you say North America, I Q. 23 like to use the term Ishihara to refer to the whole 23 understand -- are you referring to United States plus group collectively, ISK for the Japanese parent and 24 24 Canada? 25 ICUSA for the US subsidiary. Can we agree on that? 25 Yes, that's pretty much it. A.

3 (Pages 9 to 12)

Tronox and Cristal 3/21/2018



4 (Pages 13 to 16)

Duenwald

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17 And I'm not so familiar with the other 1 1 They may have small offices in India, but 2 companies of ISK subsidiaries here. But we have I'm not even sure. I think the main offices would be 2 3 generally a biosciences business, which is primarily 3 those: Korea, Taiwan, Singapore and US. And I pesticide/crop protection, I think is the current believe in Shanghai, they have someone also. 4 4 term, and related products. And I think that is most Okay. And are those subsidiaries involved 5 5 6 of the other sales in North America would be related in the business of selling or distributing TiO2? 6 7 to crop protection chemicals. 7 A. 8 Okay. And today all of the TiO2 that ICUSA 8 And would that be TiO2 exclusively produced Q. 9 sells in North America is produced in Japan; is that 9 by ISK? 10 I'm not a hundred percent sure for the right? 10 A. 11 A. That's correct. 11 subsidiaries. I would think so, based on my 12 Q. Does ICUSA compete with other suppliers in 12 understanding. But I'm not involved much with those 13 North America? 13 businesses. 14 14 Okay. Is ISK a global producer of TiO2? MR. INGRAM: Objection. Vague as to the 15 Q. Who are those suppliers? 15 MR. EDMONDSON: Objection. Vague as to 16 16 term "global." 17 what's being supplied. THE WITNESS: I'm not sure. Certainly they 17 MR. PRUITT: Can you hear him? have sales in a number of foreign countries. So 18 18 THE REPORTER: Yes. 19 under that definition, yes. 19 BY MR. PRUITT: Do you know how many 20 THE WITNESS: Do I answer? 20 21 BY MR. PRUITT: Yes, you still answer. 21 continents ISK sells its TiO2 in? 22 22 I believe they sell in North America, 23 23 Europe, Asia, Australia, Africa. 24 24 When you say Asia, would that include Q. 25 25 Asia-Pacific? 18

1 And also some importers also, probably, of a A. 2 variety.

3 Q. Who would those be?

- I'm not even sure of the names. A number 4 A.
- from China that are sold through brokers. It seems 5
- like with the acquisitions recently. That's all I 6
- 7 can think of right now of importers.
 - Do you know where these brokers are located? Q.
- 9 No, I really don't. A.
- All right. And of course you understand I'm 10
- referring to TiO2? 11
- 12 Yes. A

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- Now, I understand ICUSA is a wholly owned 13
- subsidiary of ISK; is that right? 14
- That's right. 15
- 16 To your knowledge, does ISK have other
- 17 subsidiaries that operate outside North America?
- 18 A. Yes, they do.
- 19 What are those, to your knowledge? Q.
- 20 The ones that I'm familiar with are in A.
- Taiwan, ISK Taiwan. There is an ISK Korean office. 21
- 22 I'm not sure what the name is. There is an
- 23 international office in Singapore. And that's all I
- can think of right now. I think that -- are the main 24
 - ones.

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- 1 A. 2
 - ISK is the largest TiO2 producer in Japan, I Q.
- 3 understand; is that right?
- That is my understanding also. 4
- 5 Q. Does ICUSA operate wholly and independently 6 of ISK?
- We work together with ISK. 7 A.
 - Okay. Can you maybe just explain what that relationship is?

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MR. EDMONDSON: Objection. Foundation.

Leading. 19

20 THE WITNESS: Yes, I would say that's

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22 BY MR. PRUITT: And the same for the other

subsidiaries of ISK?

24 To the best of my understanding.

MR. EDMONDSON: Objection. Foundation.

5 (Pages 17 to 20)

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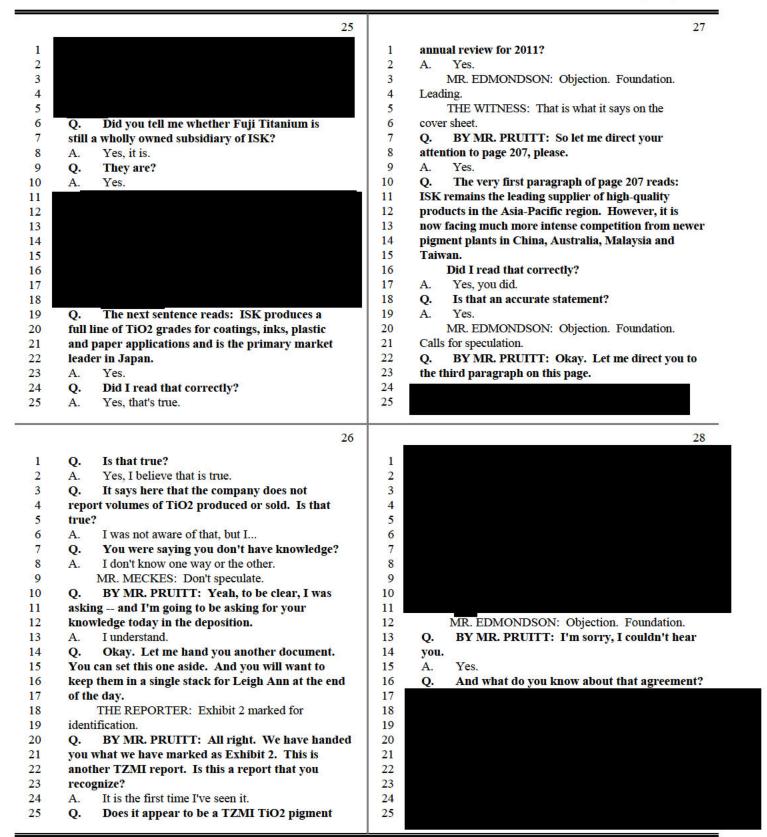
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23 21 THE WITNESS: To the best of my 1 1 Yokkaichi plant? understanding, yes. 2 2 Yokkaichi, yes. 3 3 BY MR. PRUITT: For ICUSA, how does that Yokkaichi? Q. work? How do you - how is it determined how much 4 A. 4 Yes. 5 5 volume is shipped to ICUSA to be distributed in North That is an ISK TiO2 plant in Japan, right? Q. America? 6 6 7 7 MR. EDMONDSON: Objection. Vague as to the 8 term "volume." 8 9 9 10 10 11 11 12 12 13 13 14 14 15 15 MR. EDMONDSON: Objection. 16 16 17 BY MR. PRUITT: Who do you report to, 17 18 Mr. Duenwald? 18 19 Marvin Hosokawa, the president of ICUSA. 19 And do you know who he reports to? 20 20 Yokkaichi plant, correct? No, not exactly. ISK generally, but I --21 Yes, that's correct. 21 specifically, there's probably quite a few people 22 22 There is also a reference on this page to Q. plants at Hiratsuka and Kobe? 23 that he would say. 23 THE REPORTER: Exhibit 1 marked for 24 24 A. Yes. 25 identification. 25 Does ISK still own the Hiratsuka and Kobe Q. 22 24 plants? 1 BY MR. PRUITT: All right, Mr. Duenwald. 1 2 I'm handing you what we just marked as Exhibit 1 to 2 A. 3 What kind of plants are these? What kind of your deposition. Take a moment to review this 3 TiO2 do they produce? 4 document. 4 5 My first question, though, is do you 5 recognize this as a report generated by TZMI? 6 6 MR. EDMONDSON: Objection. Leading. 7 7 8 THE WITNESS: I can see that that is what is 8 9 9 on the title page. 10 10 BY MR. PRUITT: Are you familiar with TZMI? 11 Yes, vaguely. I know they do these kinds of 11 12 12 reports. 13 Q. Is ICUSA a subscriber to TZMI's data or 13 reports? 14 14 15 15 ICUSA is not. Α. 16 Do you know if ISK is? 16 Q. 17 17 A. I don't know if they are or not. 18 18 O. Does ICUSA consume TZMI data or reports in 19 19 any form? 20 20 Not that I'm aware of. A. 21 21 Okay. I want to direct your attention to Q. 22 22 page 110. 23 23 24 24 And feel free to review this page, but my 25 25 first question is I see a reference to -- oh, the

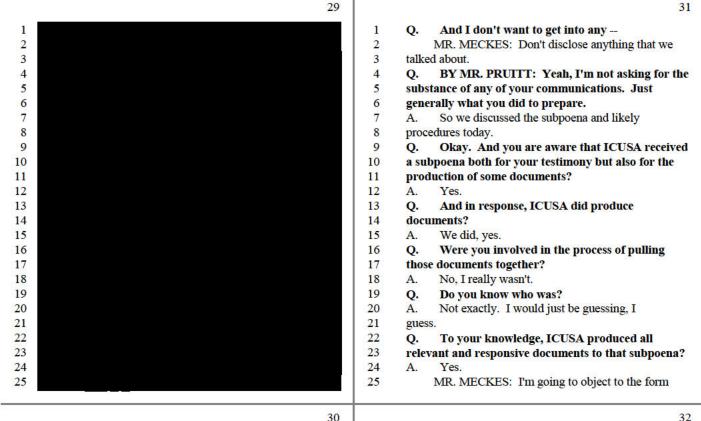
6 (Pages 21 to 24)

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7 (Pages 25 to 28)

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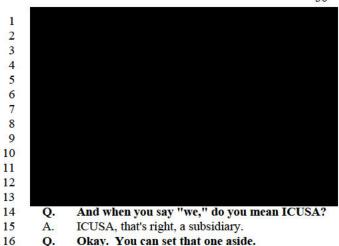
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Now, Mr. Duenwald, we didn't cover this up front, but you understand today that you are testifying as a representative for ICUSA?

20 A. Yes, I do.

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MR. EDMONDSON: Objection. Foundation.

- BY MR. PRUITT: What did you do today -what did you do to prepare for your testimony today?
- I read through the subpoena that we received 24 and then discussed it with -- with Mr. Meckes. 25

of that question. I think we kind of engaged in a back-and-forth with other folks at Kirkland & Ellis, and there was a limited series of communications limiting the scope of the subpoena. And I think that I'll represent to you that we produced the documents that were within the scope of that limited subpoena.

MR. PRUITT: Sure. We'll say subject to obviously what we negotiated with counsel in terms of limiting the scope.

MR. MECKES: Fair enough.

BY MR. PRUITT: But to your knowledge, all the documents subject to that caveat were produced? A. Yes.

MR. EDMONDSON: Objection. Foundation. Leading.

MR. MECKES: And just to be clear, what we produced was -- we actually created a document or series of documents setting forth certain information about customers and volumes of sales, et cetera.

MR. PRUITT: Right. Well I'm going to show him those documents and I'll want to see what he can speak to about that.

MR. MECKES: Fair enough. And if this is a good time, I'll object -- not object. I'll designate this testimony as confidential under the protective

8 (Pages 29 to 32)

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order. MR. PRUITT: Anytime is a good time for that indeed. As long as you say it, is all. 1 A. The grades that are listed there, CR-50, CR-50-2, et cetera. This is a list of our sales of those grades.	
2 MR. PRUITT: Anytime is a good time for that 3 indeed. As long as you say it, is all. 2 CR-50-2, et cetera. This is a list of our sales of those grades.	
3 indeed. As long as you say it, is all. 3 those grades.	
4 No objection to that, by the way. 4 Q. Okay. Well, with respect to Exhibit 3, w	ere
5 THE REPORTER: Attorneys' eyes only or 5 there other grades of TiO2 that ICUSA sold in	
6 MR. MECKES: I think there's one level of 6 that are not reflected on this exhibit?	
7 confidentiality in this in this matter. 7 A. There are other TiO2 grades, yes, that we	
8 MR. PRUITT: We'll just say subject to the 8 sold that are not part of this.	
9 terms of the protective order that is set forth in 9 Q. To your knowledge, what are those grad	es?
the case. Are you fine with that? 10 A. It would be hard for me to list all of them.	
MR. MECKES: To the extent there is any 11 Generally speaking, they would be the sulfate gra	des
change in the protective order such that it becomes a 12 that we sell.	
two-level, we would be designated as highly 13 Q. Okay.	
14 confidential, yes. 14 A. Sulfate process grades.	
MR. PRUITT: Okay. We are going to mark 15 Q. And why were the sulfate process grades	5
three exhibits and hand you those exhibits. And they 16 excluded from this list?	
17 will be 17 A. I don't know why not.	
THE REPORTER: 3 through 5.	
19 MR. PRUITT: 3, 4 and 5. 19 THE WITNESS: Perhaps they weren't aske	d
THE REPORTER: Exhibits 3, 4 and 5 marked 20 for.	
21 for identification. 21 MR. MECKES: I'll put into the record that	cc
22 MR. EDMONDSON: Just to be clear, ISH 0001 22 we had an exchange with Mr. Avallone of your o and he identified specific grades that Tronox was	mce,
 is Exhibit 3 to this deposition? MR. PRUITT: That's correct. and he identified specific grades that Tronox was interested in here. 	
25 MR. EDMONDSON: And then ISH 0002 is 25 Q. BY MR. PRUITT: So then the grades the state of the	not ara
25 WIR. EDWIONDSON. And then 1311 0002 is 25 Q. B1 WIR. I ROTT 1. 30 then the grades to	iat ai c
34	36
1 Exhibit 4 to this deposition? 1 listed here are, to your understanding, those to	hat
2 MR. PRUITT: That's right. 2 were specifically requested?	
3 MR. EDMONDSON: And then ISH 0003 would be 3 MR. MECKES: Just to move things along	5, I'll
4 Exhibit 5 to this deposition. 4 try to explain.	
5 MR. PRUITT: That's right. 5 So Mr. Avallone sent us a list of grades.	
6 MR. EDMONDSON: Thank you. 6 These are the grades. This isn't all of the grades	
7 MR. PRUITT: You are stealing my thunder, 7 that he listed because the grades that these are	
8 Eric. 8 the only grades that he listed that were actually	
9 Q. I was going to ask you, have we put in front 9 sold.	
of you Exhibits 3, 4 and 5 that are bearing the Bates 11 ISH 0001, ISH 0002 and ISH 0003 respectively? 12 So to the extent a grade was listed by 13 Mr. Avallone and it is not shown on this list, it was a second of the extent a grade was listed by	waa
	vas
	iic
13 Q. Do you recognize these documents? 14 A. Yes, I do. 15 other words, if there is another grade that is on head 14 list and it is not shown here, then from you know the shown here, then from you know the shown here.	
14 A. Yes, 1 do. 15 Q. What are they? 15 say in Exhibit 3 in 2015, ICUSA did not sell tha	
16 A. These are a list of our TiO2 sales of 16 grade.	·
17 certain grades over a three-year period year by year. 17 Q. BY MR. PRUITT: Okay. Well, I'm go	ing to
18 Q. Okay. ISH 0001 is for 2015? 18 ask sort of the converse of that.	
19 A. Yes, that's right. 19 Are there any grades and this is, I	
20 Q. 0002 is for 2016? 20 guess, a question for both of you. Are there a	ny
21 A. Yes. 21 grades of TiO2 that were sold in 2015 that we	
22 Q. 0003 is for 2017? 22 listed?	
23 A. Yes. 23 A. Yes, that's true.	
24 Q. You said certain grades. What do you mean 24 Q. Okay. And that	
25 by that? 25 A. TiO2.	

9 (Pages 33 to 36)

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37 1 Q. - were not asked for by Mr. Avallone? 2 That's true, yes. A. 3 O. Okay. To your knowledge --4 I guess I can't say -- I don't know what he 5 asked for, I should say. 6 MR. MECKES: Right. 7 THE WITNESS: We do have other grades. 8 MR. MECKES: I mean if it is of interest, during the break I can get the e-mail. But I don't 9 10 think you are --11 MR. PRUITT: No, I don't need the e-mail. 12 But let me just try to get his knowledge of just the other sulfate grades, and we'll ignore, for purposes 13 of my questions, what may or may not have been asked 14 for by my colleague. 15 THE WITNESS: Okay. 16 17 18 19 20

1 And I see here below the grades a box 2 entitled "Customer" and what looks like a list of 3 customers; is that right?

Are these all the customers that would have O. been sold the grades listed on the page?

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I believe that's true but --MR. MECKES: Object to the form.

THE WITNESS: -- it's hard for me -- I 9 10 didn't go through the -- our sales list myself. But

11 it looks like that might be what it is.

BY MR. PRUITT: Okay. And the sulfate TiO2 grades that you just listed, would those have been sold to these customers or to some other group of customers?

16 Some were sold to these customers and some 17 were sold to other customers as well.

> Okay. And if you don't mind, to your knowledge, could you list some of the other customers that are not on this page on these exhibits that those sulfate TiO2 grades would have been sold to?

Yes, I can. I'm not sure -- I guess -- just trying not to violate the confidence of the customers that we have. But certainly I know that information.

Sure. And that's partly why everything is

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1 2 3 4 5 6 7 8 9

> Okay. Thank you. All the grades you just listed, those are sulfate grades?

A. Those are sulfate-process grades.

And those are sold in North America? Q.

A.

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O. Okay. I'm going to ask you the same question, if you don't mind, for 2016 and 2017.

Yes, it looks like it is the same grades that are covered by the -- in the sales that are listed here, just a select number of chloride grades

and sulfate grades are not listed. So, in those

years also we sold those same grades I mentioned, the 22 23 sulfate-process grades.

24 Okay. Thank you. In North America? Q.

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A. Yes, in North America. subject to confidentiality. So, subject to any objections from your counsel --

MR. MECKES: Well, the only question that I would have is -- and maybe we need to take a break and confer about this -- is whether or not there might be an NDA with the customer such that notice would have to be given before disclosing.

THE WITNESS: Yeah, that would be hard for me to even remember whether -- if we have any, they would be -- have been made a long time ago and out of my thinking right now. It's possible.

MR. PRUITT: Well subject to objections on the basis of attorney-client privilege or something like that, I don't think there is going to be any basis for him not to disclose that during the deposition.

MR. MECKES: Well, I think there is because -- we don't need to argue about it, but maybe you can -- maybe you can move to the next line of questioning, and he and I can talk during the break and then we can decide what we are going to do.

MR. PRUITT: Okay.

Well, before I move on, let me just ask you, Q. are there any customers not on this list to whom you sold those sulfate TiO2 grades who you know are not

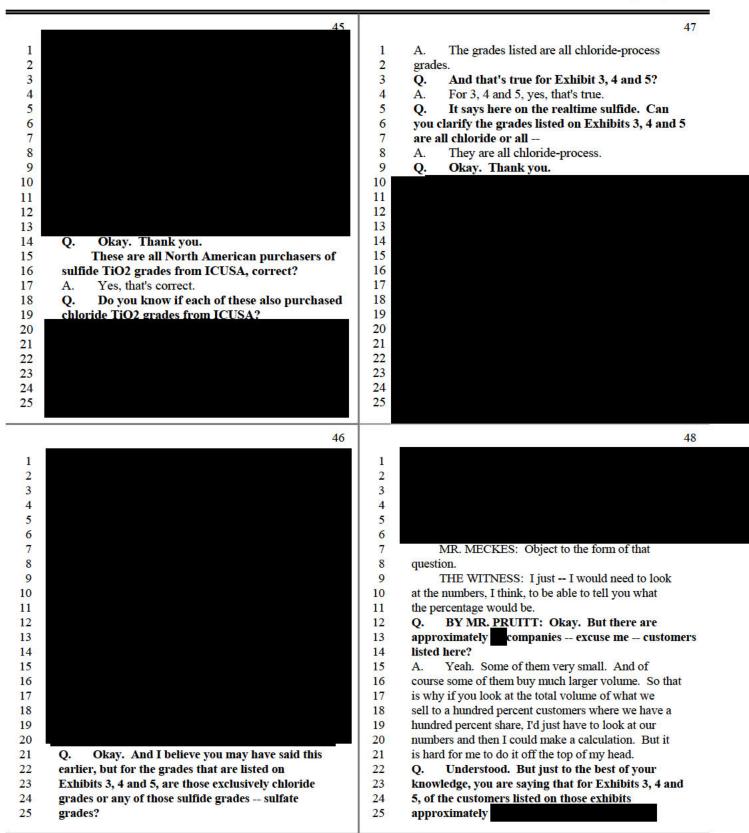
10 (Pages 37 to 40)

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41 43 THE WITNESS: It's a parent company in 1 subject to any nondisclosure agreements or 1 2 confidentiality agreements that you can disclose Cleveland, Ohio. 2 3 3 today? BY MR. PRUITT: Sorry. Do you know if they That would be hard for me to say. Like I 4 have any business activities or operations in the 4 5 5 say, I really don't know which ones we have those United States? My best understanding is that is also the kinds of agreements with. And especially because 6 6 7 parent company of the other US subsidiary companies. 7 sometimes -- I just -- I'm not a lawyer, but I know 8 Okay. But do you know if they themselves there are purchase contracts and things that they 8 9 send to us with language that I don't even understand 9 have any -on the back of them. And I'm just not sure what that 10 A. ISK Americas? 10 says or what kind of weight it has. 11 Correct. If they have any business 11 O. 12 Understood. 12 operations or activities themselves in the United Can you tell me approximately how many 13 States, sales distribution? 13 I believe a holding company would be my best 14 customers at least would have been purchasing that 14 understanding of the role of ISK Americas, yes. 15 15 Pretty -- mostly a guess. I would say 16 Okay. I appreciate that clarification. And 16 if at any other time during the day you realize you probably --17 17 And they would be located in North America? need to make a comment or clarification for the 18 18 Q. 19 record, of course feel free to do that at any time. 19 A. Okay. Thank you. 20 20 Are any of the customers that are listed here on this exhibit, to your knowledge, subject to 21 Now, turning your attention back to 21 these nondisclosure or confidentiality agreements 22 Exhibit 3. To clarify, is it your understanding that 22 23 that you are referring to? 23 Exhibits 3, 4 and 5 were created based on information I just don't know which of our customers 24 24 maintained in the ordinary course of business by would be subject to those agreements. 25 25 ICUSA? 42 44 1 Q. Okay. But it is possible that these 1 A. 2 2 customers would also be subject to that? Q. And do you recall before the break I was Possible. Yes, it's possible. 3 asking you about some of the purchasers of the 3 MR. PRUITT: Okay. Well, do you want to 4 sulfate TiO2 grades that were not listed on these 4 5 5 exhibits? take a break now? MR. MECKES: Sure. Seems like as good a 6 A. 6 7 time as any. 7 Can you identify who those purchasers are? Q. 8 THE VIDEOGRAPHER: Don't forget your 8 Yes, I will try to recall who they are. I 9 microphones, please. 9 purchases sulfate grades as well The time is 9:55 a m. We are off the as -- sulfate grades as well as chloride grades. 10 10 11 record. 11 12 (Recess taken.) And I'm sorry to interrupt, but just for the 12 13 THE VIDEOGRAPHER: The time is 10:09 a m. 13 benefit of Leigh Ann, would you mind spelling some of 14 We are back on the record. these companies when you say them? 14 BY MR. PRUITT: Okay. Mr. Duenwald, I 15 15 understand you have a comment or correction you 16 16 wanted to make to prior testimony; is that right? 17 17 Yes. On the ownership of Ishihara 18 18 19 Corporation USA, we are a hundred percent owned by 19 ISK Americas. And ISK Americas is one hundred 20 20 21 percent owned by ISK Japan. 21 Okay. Is ISK Americas just a holding 22 Q. 22 23 company? 23 24 I don't know how to comment on ISK Americas. 24 25 MR. MECKES: Tell him what you know. 25

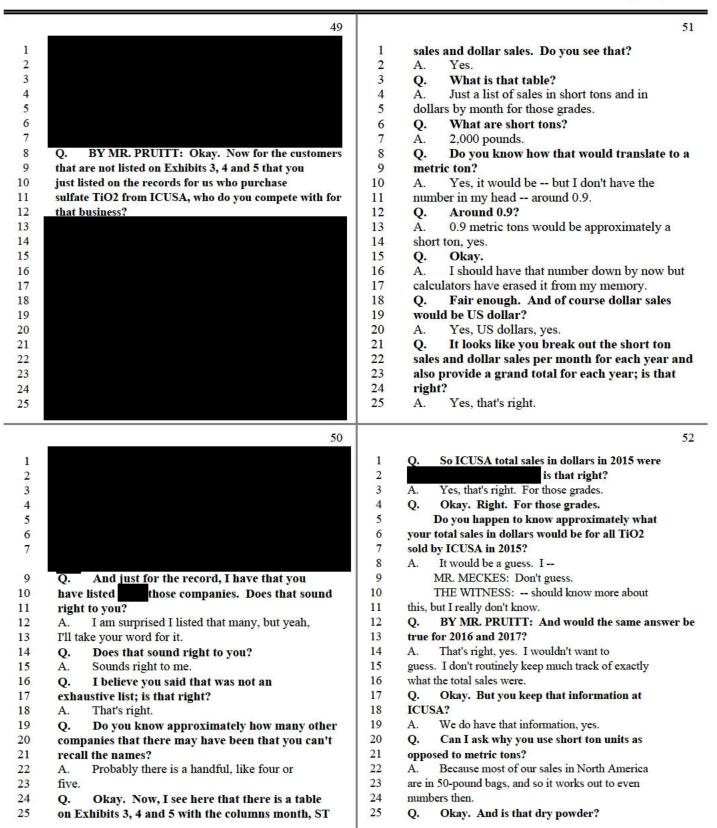
11 (Pages 41 to 44)

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12 (Pages 45 to 48)

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13 (Pages 49 to 52)

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53 55 Okay. But to your knowledge, it is true 1 Yes, mostly. Yes. In fact, all of them are 1 2 2 that they were a customer in 2016 but not 2017? dry powder. 3 3 I just -- like I say, I don't have much O. Where is all of the TiO2 sold by ICUSA 4 recollection of They have not been a major imported to? customer during the time I have been at Ishihara. 5 5 They most likely purchased a very small quantity. 6 6 7 7 Okay. I see the same thing for is that right? That they are a customer 8 8 9 9 in 2016 but not 2017? 10 10 -- in fact, they have 11 11 changed their name and I can't remember what their 12 12 new name is either. But, yes, I believe they purchased some sample quantities for testing and it 13 Okay. I want to ask you to take a look at 13 didn't -- we didn't get a major relationship, major 14 both Exhibit 4 and Exhibit 5. 14 15 Do you see that is a customer in 15 commercial relationship. Okay. And then finally I see the same thing 16 2017 but it is not a customer in 2016? 16 They are a customer in 2016 but 17 for 17 18 not 2017; is that right? 18 Q. Do you know why that is? 19 I think they are in 2017 also. 19 A. Yes, I do. 20 Oh, you're right. Okay. They are listed in 20 Why is that? Q. Q. There is a new grade that they are 21 both. 21 interested in and we -- they weren't interested in it 22 Yeah, they are there each year. 22 A. prior to 2017. 23 Okay. Mr. Duenwald, do you have any 23 Q. 24 knowledge of any of your TiO2 customers switching to 24 Q. What grade is that? 25 other suppliers at any time? 25 A. It's PFC-105. 54 56 1 Q. Is that a sulfate or chloride grade? 1 A. That's a chloride grade. 2 Approximately how many of your customers 2 A. Q. 3 I see also that have switched to other suppliers? 3 is a customer in 2017 but not a customer in 2016; is 4 Customers that we no longer sell to among A. that right? 5 those that are still our customers or --5 Yes, that's right. 6 And, in fact, I'm asking you either way. So 6 A. 7 customers that have either switched from another 7 Do you know why that is? Q. supplier to ICUSA or customers that have switched And it is the same reason. They are also 8 8 9 interested in PFC-105 and that is a recent from ICUSA to another supplier. 9 10 MR. EDMONDSON: Objection. Compound. 10 development. THE WITNESS: Yes, certainly there are both. Okay. I see that 11 11 was a customer in 2016 but not a customer in 2017; is 12 It is hard for me to put a number on it. But it 12 13 happens frequently. 13 that right? BY MR. PRUITT: Okay. And why does it Yes, according to this. I was trying to 14 14 15 remember customer -products does happen frequently? 15 Because of -- sometimes because of pricing, 16 not -- I do not recall even any relationship with 16 sometimes because of quality, sometimes changes in 17 17 them. I am -- although I don't know, I would assume that must be a very small sale. And I may not have business, sometimes plant shutdowns or movement of 18 18 19 production from one site to another. I can think of 19 even been involved. 20 a number of cases. 20 I do remember -- I do have a folder that 21 Is this true for customers who purchased on it, and I remember going through my 21 22 both chloride- and sulfate-grade TiO2? files wondering, What is that company, why do I have 22 23 A. 23 that file? And so I really can't recall. But maybe 24 MR. EDMONDSON: I'll object to that last they have got a sample and purchased a bag or 24 question as leading. something as a larger sample. 25 25

14 (Pages 53 to 56)

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57 59 1 MR. PRUITT: As what now? 1 to maintain level of sales. 2 MR. EDMONDSON: Leading. Which of your competitors do you consider 2 3 MR. PRUITT: Okay. 3 the most aggressive in terms of competition? You can hear him? 4 I would say if -- different aspects. I 5 THE REPORTER: I can hear him. 5 think on product quality and it would also depend on BY MR. PRUITT: Do customers who switch from some extent the industry that we were looking at, all 6 6 7 7 of the competitors, especially the US suppliers ICUSA to other suppliers give you notice of that? 8 are -- I have the highest respect for. I think they 8 Not always but usually. 9 When they give you notice, what do you do? 9 are all very high-quality materials and they are Q. MR. EDMONDSON: Objection. Vague. 10 usually very responsive on pricing and so it is -- I 10 11 guess that's probably why earlier I said it is a very 11 12 12 competitive market and that's what makes it 13 13 competitive. I think they are very -- they are very 14 14 good companies that we compete against. 15 15 And just to be clear, you said it depends on some extent the industry that we are looking at. Are 16 BY MR. PRUITT: You will try to accommodate 16 you referring to the end-use application of the TiO2 17 whatever it is that they are seeking to --17 product? 18 18 Sometimes that's true. 19 19 For you to retain the volume? A. 20 Sometimes we are not able to and sometimes 20 Okay. What about the Chinese, are you 21 competitive with the Chinese? 21 it is an issue that we are not really able to MR. EDMONDSON: Objection. Vague as to the 22 22 address. 23 term "the Chinese." 23 Okay. When customers switch from other 24 THE WITNESS: Generally speaking with the 24 suppliers to ICUSA, generally how does that work? 25 Chinese material, yes, I would say we have to be 25 Usually it is, I guess, in -- either a 58 60 1 question of product quality or service or pricing. 1 somewhat competitive with the Chinese, yes. Depending on really the time and what our -- I think 2 BY MR. PRUITT: Which Chinese TiO2 company 2 3 what our situation is, whether we are looking for is most aggressive in terms of competition in your 3 4 additional volumes or not. 4 experience? Okay. And typically do customers reach out 5 5 6 to you or do you reach out to customers? 6 7 7 And why are they, in your experience -- or I 8 should say how are they most aggressive in terms of 8 9 competition? 9 10 10 O. And do you actively seek out business in 11 11 that sense? 12 12 Yes. Yes, we do. 13 13 Is that true for both your chloride and 14 14 sulfate TiO2 products? 15 15 Yes, it is. 16 In your experience, is the TiO2 industry 16 O. highly competitive? Are you seeing an increasing presence of 17 17 18 18 Yes, it is. Chinese TiO2 supply in the United States? MR. EDMONDSON: Objection. Vague as to the 19 A. Yes. 19 20 MR. EDMONDSON: Objection. Vague as to the 20 term "foundation" and vague as to the term 21 term "increasing presence," and foundation. 21 "competitive." 22 BY MR. PRUITT: Is that true for both 22 BY MR. PRUITT: Can you describe that for O. 23 23 chloride and sulfate TiO2? me, please? That I think there is a lot of -- you have 24 24 A. 25 to compete both on price and product quality in order 25 Q. Are you seeing increasing quality of Chinese

15 (Pages 57 to 60)

Tronox and Cristal 3/21/2018 61 63 1 TiO2 being imported into the United States? That if -- in some cases even if the price 1 2 Yes, I'm seeing that as well. 2 is lower, they may need to use a larger volume of the 3 3 MR. EDMONDSON: Objection. Vague as to the Chinese product in order to get the same results, get 4 the same appearance as what you would get with a 4 5 BY MR. PRUITT: Are the Chinese TiO2 5 grade from a US supplier of Ishihara, I think, or producers becoming increasingly competitive with 6 say -- basically performance, I guess. That there 6 7 7 are various performance characteristics that aren't ICUSA over time? 8 MR. EDMONDSON: Objection. Leading. 8 easy to disperse or durability or kinds of things 9 that TiO2 customers are looking to improve. 9 Foundation. 10 THE WITNESS: I would say they are getting 10 Okay. I want to switch gears a little bit 11 to be stronger competitors, yes. Especially looking 11 and ask you about customers that switch between 12 over the past ten years, I think they are -- they are 12 chloride and sulfate TiO2 products. stronger -- they have stronger positions now than 13 13 A. Sure 14 they did last year, the year before, yes. So I would 14 Are you aware of customers that do in fact say each year they are probably getting stronger. 15 15 switch between chloride and sulfate TiO2 products? 16 BY MR. PRUITT: Are you increasingly losing 16 A. Yes, I am. 17 customers who are switching over to Chinese 17 O. How common is that? It's not real common but it is not uncommon 18 18 producers? MR. EDMONDSON: Objection. Leading. 19 19 either. It's -- I think -- certainly it happens. I would say it is not very common but it does happen. 20 20 Foundation. THE WITNESS: No, I don't think -- it hasn't 21 21 To your knowledge what drives that? 22 been a major problem for us in the recent past, I 22 Either -- depends again. It is complicated would say. A couple of years ago I think there were 23 reasons that customers make supply decisions or which 23 24 some cases where we lost some volume to Chinese 24 suppliers to purchase from. But I would say 25 suppliers because of dramatically lower prices that 25 sometimes it is based on quality, sometimes it is 62 64 1 were being offered. 1 based on price, sometimes it is based on shortages of 2 BY MR. PRUITT: In your experience are you 2 product that are not available for one reason or seeing the Chinese TiO2 producers compete with the 3 3 another. other suppliers of TiO2 in North America? 4 Is it your understanding that generally a 4 MR. EDMONDSON: Objection. Foundation. 5 5 customer who purchases TiO2 has to approve or THE WITNESS: Yes, I think they are getting formulate their product to be able to take either a 6 to be more competitive and we are seeing them I think 7 7 chloride or a sulfate TiO2? in -- add more customers. 8 MR. EDMONDSON: Objection. Foundation. 8 9 9 BY MR. PRUITT: And what does that look like Q. Leading. 10 10 that it is getting more competitive? THE WITNESS: I'm not sure I understand that 11 That I think there are more technical 11 question. Do you mean do they need specifically some 12 directors, for example, I talk with who have tested 12 applications would require chloride only, some 13 Chinese grades, I'm hearing more reports that certain 13 require sulfate? 14 grades have been approved, and I'm hearing from 14 MR. EDMONDSON: Objection. Nonresponsive. purchasing managers that they received offers for --15 15 Move to strike. that have been of interest they are pursuing. 16 16 BY MR. PRUITT: That's not quite what I'm 17 Is price one of the factors as to why 17 asking. What I'm saying is a customer purchases a 18 Chinese TiO2 producers are becoming more competitive 18 particular grade of TiO2, right, and it's typically in North America? 19 19 used in one of their products; is that right? 20 Yes, I think it is. 20 21 Q. What role does quality of Chinese TiO2 21 O. And what I'm asking is does that particular product play in your experience? 22 22 product have to be formulated to accept a particular 23 It's a -- it's a major factor. Price and 23 grade of TiO2? 24 quality are both major factors. 24 Oh, okay. Sometimes -- let me put it this And how is quality a major factor? 2.5 25 way. There are some products if they are formulated

16 (Pages 61 to 64)

Duenwald

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65 67 with a particular chloride grade, for example, it TiO2 suppliers. Smaller customers, I would say 1 1 2 that's where it is probably -- you see more often 2 would be -- it would require a change in the 3 3 that they rely on a single source. formulation for them to use a sulfate grade and vice 4 4 For the larger customers that do have 5 5 Okay. So I'll refer to those as multiple TiO2 suppliers, do you see that -- in your Q. reformulations. 6 6 experience is that a source of leverage that they use 7 7 Okay. over suppliers? A. 8 8 Yes, I think it is. Q. Are you aware of any of your customers who A. 9 reformulate their product to accept either chloride 9 How so? O. 10 They can -- if they receive a favorable or sulfate TiO2? 10 A. 11 A. Yes, I am. 11 price from one supplier, they will let you know and 12 Q. How common is that? 12 expect you to meet that price. 13 It happens. Yeah, it's not uncommon. 13 Will they threaten to reduce volume from you A. 14 How many of your customers do that to your 14 to increase volume to another supplier? 15 knowledge? 15 That certainly happens, yes. 16 16 17 17 18 18 19 in your experience? 19 I would say -- I need to think about it a 20 20 21 minute just because of the -- I think -- I would say 21 probably more common because of the fact that supply 22 22 23 situation currently is rather tight, and so in order 23 And is ICUSA ever on the other side of that Q. to take advantage of more purchasing opportunities, I 24 24 equation where you are using your -- you are being --25 think that there may be more consideration of 25 strike that -- where a customer is using ICUSA as 66 68 1 changing formulations to accept either a sulfate or a 1 leverage over another supplier? Do you understand 2 chloride grade. 2 3 In your experience does that give customers 3 leverage over suppliers in that they can switch to 4 4 5 other suppliers? 5 MR. EDMONDSON: Objection. Leading. 6 6 Foundation. Vague as to the term "leverage." 7 7 8 THE WITNESS: Yes, I would say that it does 8 9 give customers more power negotiating if they can use 9 10 both types. 10 BY MR. PRUITT: Now, just generally in the 11 11 12 TiO2 industry, is it your experience that customers 12 13 do have significant leverage over suppliers? 13 14 Oh, yes, I think they do. 14 Why is that? 15 Q. 15 Because of the purchase volumes that they 16 A. 16 17 control. 17 18 And what do you mean by that? 18 We need the volume, we need to sell, and the 19 19 customers are the ones who are in control of that 20 20 21 decision of who they purchase from, how much they 21 purchase. 22 22 23 In your experience do customers generally O. 23

17 (Pages 65 to 68)

Okay. Switching gears again slightly.

Let's talk about the applications for the TiO2

24

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have multiple TiO2 suppliers?

Larger customers generally have multiple

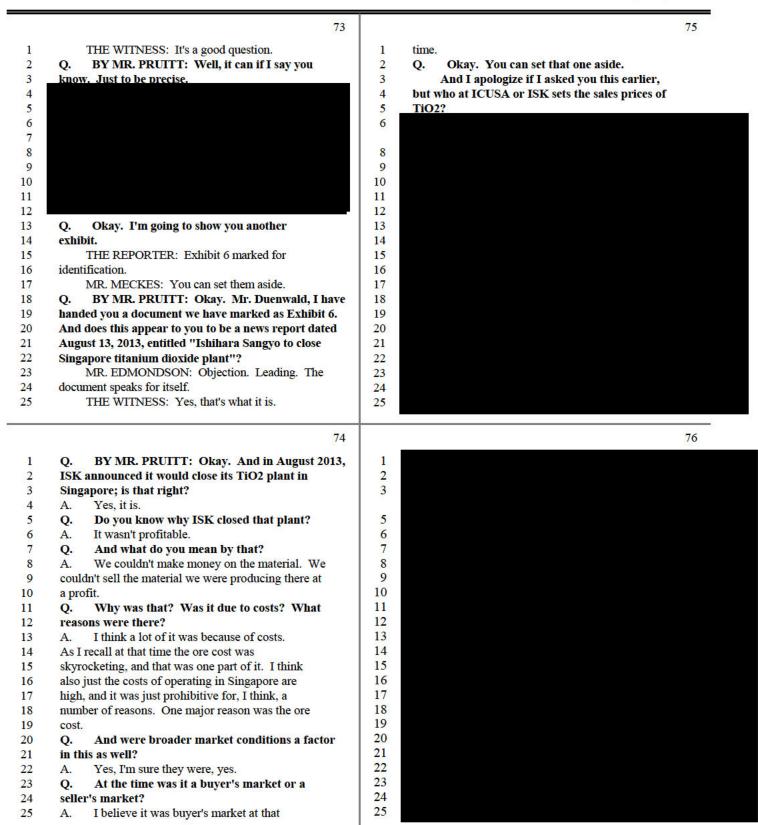
Duenwald

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		1	
	69		71
1	products that ICUSA sells. Can you give me an	1	
2	overview, what types of end uses and applications are	2	
3	the TiO2 products that you sell used for?	3	
4	 Yeah. Paint and coatings, inks, plastics. 	4	
5	That pretty much covers most I guess some kinds of	5	
6	concrete coloring. Coloring of various materials.	6	Q. Mr. Duenwald, do you know of any customers
7	Q. Are your chloride TiO2 products used in the	7	that blend sulfate TiO2 with chloride TiO2 in their
8	paint and coatings industry?	8	products?
9	A. Yes, they are.	9	A. I don't think I do, no. I can't think of a
10	Q. Are your sulfate TiO2 products used in the	10	case.
11	paint and coatings industry?	11	Q. Mr. Duenwald, would you agree that the TiO2
12	A. Yes, they are.	12	industry is cyclical?
13	Q. Are your chloride TiO2 products used in the	13	MR. EDMONDSON: Objection.
14	plastics industry?	14	THE WITNESS: Yes.
15	A. Yes.	15	MR. EDMONDSON: Leading. Foundation. Vague
16	Q. What about your sulfate TiO2 products?	16	as to the term "cyclical."
17	A. Sulfate also, yes.	17	Q. BY MR. PRUITT: Can you describe that,
18	Q. And then for inks, is that just sulfate?	18	please?
19	A. Both chloride and sulfate.	19	A. There are times when product is in short
20	Q. It is both?	20	supply, and it is more of a seller's market, and
21	A. Yes.	21	there are others times when there is an oversupply
22	Q. Okay. Do your customers have specific	22	and it is a buyer's market.
23	requirements for TiO2 packaging, how it is packaged?	23 24	Q. And does it cycle between seller's markets
24 25	A. Some of them do, some are more flexible.	25	and buyer's markets? A. Yes.
23	Q. Okay. And the ones that do, what do they	23	A. 165.
	70		72
1	require?	1	MR. EDMONDSON: Objection. Leading.
2	A. There are some that require 50-pound bags or	2	THE WITNESS: I think it does. I guess
3	25-kg bags, smaller bags, and there are some who	3	maybe from a seller's perspective it seems to be a
4	require semi-bulk containers.	4	buyer's market more of the time. But it might just
5	MR. PRUITT: Leigh Ann, my realtime	5	be my way of looking at it.
6	THE REPORTER: Can we pause for a second?	6	Q. BY MR. PRUITT: It might just be your
7	MR. PRUITT: Sure.	7	perspective?
8	(Pause in proceedings.)	8	A. Exactly.
9	Q. BY MR. PRUITT: Do any of your customers	9	Q. Approximately how long are these cycles?
10	have specific requirements for either dry TiO2	10	A. That is what I was thinking. I think that
11	packaging or in slurry form?	11	the cycles where there is short supply tend to be
12	A. Yes. Yes, some of them do.	12	relatively short, at least two or three years, but
13	Q. And what are those requirements?	13	there have been fairly long periods where there has
14	A. I'm not sure what you mean. Which	14	been an oversupply that has been more of a buyer's
15	applications you mean or?	15	market I think. So that's where I guess I'm thinking
16	Q. No, I mean	16	the number of years I have been in the industries,
		17	certainly there have been more years that it has been
17	MR. EDMONDSON: Objection. Nonresponsive.		a buyer's market than a seller's market.
18	Q. BY MR. PRUITT: No, what I'm asking is can	18	
18 19	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have	19	Q. And do you see this happening on a global
18 19 20	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have particular preferences, what preference do they have?	19 20	Q. And do you see this happening on a global basis?
18 19 20 21	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have particular preferences, what preference do they have? A. The for slurry systems, that's usually	19 20 21	Q. And do you see this happening on a global basis?A. Yes, I do.
18 19 20 21 22	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have particular preferences, what preference do they have? A. The for slurry systems, that's usually larger paint companies, and for dry it's probably	19 20 21 22	 Q. And do you see this happening on a global basis? A. Yes, I do. Q. Where are we currently in the cycle, if you
18 19 20 21 22 23	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have particular preferences, what preference do they have? A. The for slurry systems, that's usually larger paint companies, and for dry it's probably every other application and also smaller users for	19 20 21 22 23	 Q. And do you see this happening on a global basis? A. Yes, I do. Q. Where are we currently in the cycle, if you know?
18 19 20 21 22	Q. BY MR. PRUITT: No, what I'm asking is can you just describe to me the customers that have particular preferences, what preference do they have? A. The for slurry systems, that's usually larger paint companies, and for dry it's probably	19 20 21 22	 Q. And do you see this happening on a global basis? A. Yes, I do. Q. Where are we currently in the cycle, if you

18 (Pages 69 to 72)

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19 (Pages 73 to 76)

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	77		79
1		1	process, any other communications with the FTC?
2		2	A. I don't recall any other communications
3		3	regarding this Tronox-Cristal merger. I think that
4		4	is the extent of what I can remember.
5		5	MR. PRUITT: Thank you, sir. So I'm going
6		6	to reserve the balance of my time subject to whatever
7		7	questioning from the other side of the table.
8		8	MR. EDMONDSON: Okay.
9		9	MR. PRUITT: And I think we are almost done
10		10	with the tape so we should probably
11		11	MR. MECKES: Let's take a break.
12		12	THE VIDEOGRAPHER: Don't forget your
13		13	microphones, please.
14		14	This is the end of Video Number 1 of Volume
15		15	1 of the deposition of David Duenwald on March 21st,
16	ICUSA had any communications with the FTC regarding	16	2018.
17	the Tronox-Cristal acquisition?	17	The time is 11:07 a m.
18	A. Yes, we have. I have.	18	We are off the record.
19	Q. Okay. Can you describe those	19	(Recess taken.)
20	communications, please?	20	THE VIDEOGRAPHER: This is the beginning of
21	A. About a year ago I received a phone call	21	Video Number 2 of Volume 1 of the deposition of David
22	from the FTC and they scheduled we scheduled it	22	Duenwald on March 21st, 2018.
23	together a phone call between their office and our	23	The time is 11:18 a m.
24	office in San Francisco.	24	We are back on the record.
25	Q. And did you take that phone call?	25	///
	78		80
1	Δ Ves I sent it	1	
1 2	A. Yes, I sent it. O. And what did they ask you about?	1 2	EXAMINATION
2	Q. And what did they ask you about?	2	EXAMINATION BY MR. EDMONDSON:
2 3	Q. And what did they ask you about?A. They asked about our understanding of the	2 3	EXAMINATION BY MR. EDMONDSON: Q. Good morning, Mr. Duenwald. My name is Eric
2 3 4	 Q. And what did they ask you about? A. They asked about our understanding of the market, what kinds of applications we sold. It is 	2 3 4	EXAMINATION BY MR. EDMONDSON: Q. Good morning, Mr. Duenwald. My name is Eric Edmondson. I'm an attorney with the Federal Trade
2 3 4 5	 Q. And what did they ask you about? A. They asked about our understanding of the market, what kinds of applications we sold. It is hard to remember exactly. I spend so much of my time 	2 3 4 5	EXAMINATION BY MR. EDMONDSON: Q. Good morning, Mr. Duenwald. My name is Eric Edmondson. I'm an attorney with the Federal Trade Commission. We are the complainant in this case. Or
2 3 4 5 6	Q. And what did they ask you about? A. They asked about our understanding of the market, what kinds of applications we sold. It is hard to remember exactly. I spend so much of my time talking about TiO2 it is hard to remember one	2 3 4	EXAMINATION BY MR. EDMONDSON: Q. Good morning, Mr. Duenwald. My name is Eric Edmondson. I'm an attorney with the Federal Trade Commission. We are the complainant in this case. Or I represent the complainant in this case.
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	 Q. And what did they ask you about? A. They asked about our understanding of the market, what kinds of applications we sold. It is hard to remember exactly. I spend so much of my time talking about TiO2 it is hard to remember one conversation. But fairly typical kind of conversation on TiO2 markets, applications, market conditions, competition. Q. Did anyone at the FTC ask you to submit a sworn statement or affidavit regarding the acquisition? A. I don't believe I don't remember anything like that. Q. Did you offer to do so? A. No, I don't believe I did. Q. How long did that call last? A. I think it was probably 30 minutes to 	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	EXAMINATION BY MR. EDMONDSON: Q. Good morning, Mr. Duenwald. My name is Eric Edmondson. I'm an attorney with the Federal Trade Commission. We are the complainant in this case. Or I represent the complainant in this case. So, I will do my best not to ask questions or cover ground that has already been covered by defense counsel, but — or Respondents' counsel in this case, but please bear with me if I — if some of my questions are repetitive. Complainant counsel asked you whether you spoke with anyone about this deposition before appearing here today? MR. PRUITT: Object to form. Q. BY MR. EDMONDSON: Do you recall that? A. I don't recall the questions. Q. I'll just ask you. Have you spoken with
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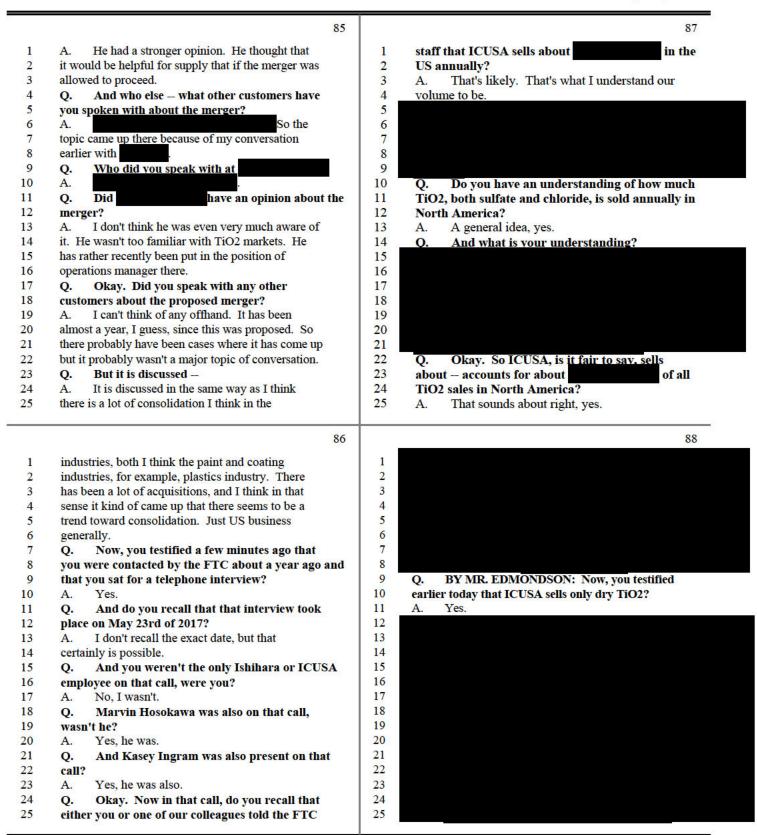
Tronox and Cristal 3/21/2018

81 83 Meckes of Squire Patton Boggs, I believe. 1 1 about this case? Wonderful. And did you meet with Mr. Meckes 2 2 MR. PRUITT: Object to form. Are you asking 3 3 prior to this deposition? for a legal conclusion? 4 Yes, I did. 4 MR. EDMONDSON: No. He is not a lawyer. A. How many times did you meet with Mr. Meckes? 5 MR. PRUITT: Object to form. 5 Q. 6 We met yesterday afternoon and then we spoke 6 BY MR. EDMONDSON: You can answer. A. Q. 7 once by phone for about an hour a couple of weeks 7 A. I have thought about it, and I have talked 8 8 with customers about it, and I can see -- it is a Was anyone else present when you met with 9 9 complicated industry, and I think that it is hard to Q. 10 Mr. Meckes vesterday afternoon? 10 know, I guess, what the -- I guess I'm thinking how 11 It was just Kasey Ingram and department 11 would it affect market conditions. And I think it is 12 counsel for Ishihara was also there. 12 complicated and it would be hard to know exactly how 13 Have you reviewed any documents or materials 13 it would affect market conditions. So I guess in 14 in preparation for this deposition? 14 that sense I thought about it and I haven't really 15 MR. MECKES: And you can answer that yes or 15 come to any conclusions. 16 So you said you have spoken with customers no. 16 about the proposed transaction of Tronox and Cristal? 17 THE WITNESS: Yes. 17 BY MR. EDMONDSON: Who gave you those 18 18 Q. A. And which customers have you spoken with? 19 19 documents? Q. Some -- well, the subpoena we viewed and 20 Last week I was in the 20 so I spoke with customers there. 21 the --21 I know 22 MR. MECKES: The question is who gave you 22 was one of them. the documents. Don't tell him what documents you 23 23 Did you speak with anyone in particular at 24 24 looked at. 25 THE WITNESS: The documents that I received. 25 A. 82 84 1 MR. MECKES: The question was who showed you 1 Q. have an opinion on the 2 merger? the documents. 2 THE WITNESS: Okay. Well, actually, the 3 3 A. I'm sure he did but he didn't really go into documents I received, I think, initially from the 4 4 it. I had told him I think that we had been 5 FTC, I think, sent me by e-mail, and that is probably 5 contacted by the FTC for information, and he said that he had also been contacted I think by -- I'm not the first time I saw them. 6 6 BY MR. EDMONDSON: So the documents you are 7 7 sure, but he said that he had also been asked for his 8 8 referring to is the subpoena requesting your opinion on it. But we didn't really discuss the 9 9 appearance here? merits of the merger. 10 A. Yes. 10 Have you spoken with other customers about 11 To appear today here as a witness in this the merger? Q. 11 12 case? 12 A. Yes. 13 And I think you have mentioned another A. 13 14 Okay. Have you read the complaint in this 14 Q. customer's name? 15 case? 15 16 Yes, I have. 16 17 Do you - what do you understand the issues 17 18 in this case to be? 18 19 My understanding is the -- well, and I'm not 19 20 sure how much I know from this and how much from 20 other places. My understanding is that the FTC is And who did you speak with at 21 21 Q. 22 objecting to the merger because it would concentrate 22 merger? 23 too much of the production capacity with one source, 23 A. 24 with one supplier. 24 O. And what was - what discussion did you have 25 Do you personally have an opinion or about the merger? 25

21 (Pages 81 to 84)

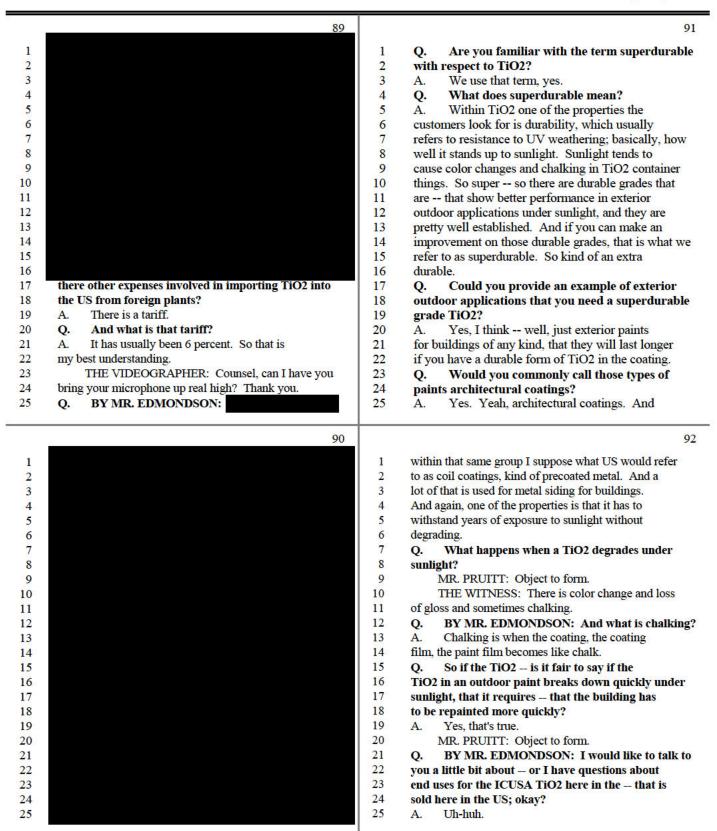
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22 (Pages 85 to 88)

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23 (Pages 89 to 92)

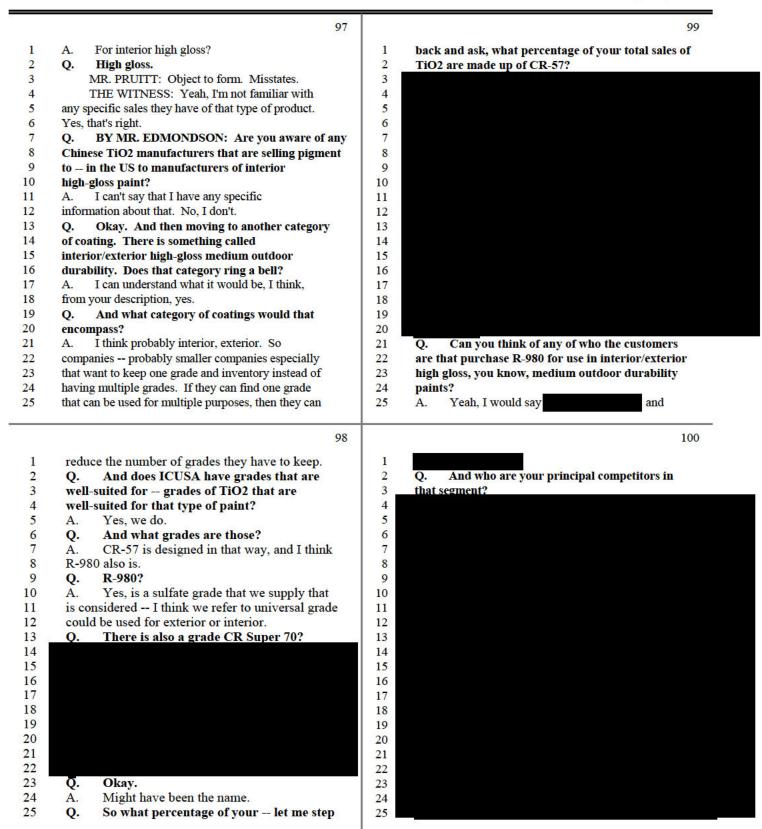
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95 93 would be one, 1 I want to first talk about the coatings, 1 I know 2 would be one, would be one. It is hard to 2 types of coatings that ICUSA products are used in. 3 3 First of all, are you familiar with the term know. I have to think. "high-gloss interior"? 4 4 Would you characterize these customers as 5 5 Yes. selling a high-end product? A. 6 MR. PRUITT: Object to form. 6 Q. And what does that mean to you? THE WITNESS: Yes, I think so, yes. 7 7 Glossy kind of paint that would be used 8 BY MR. EDMONDSON: 8 probably more for trim because it would be blinding Q. 9 if it was on the entire wall. Kind of the shiny, 9 reflective-like coating. 10 10 A. And what -- if you can think of it offhand, 11 11 Q. Q. Their product isn't aimed at the low end of what grades of Ishihara TiO2 would typically be sold 12 12 the paint -- of the interior high-gloss paint market, for interior high-gloss paints? 13 13 is it? 14 It would be CR-50-2 would be the big one. 14 I would say no, they certainly wouldn't 15 O. That's the major one. And is -- there is 15 categorize it that way. 16 also CR-50? 16 Q. Okay. So, they care about quality? 17 A. Yes, CR-50 is very similar to CR-50-2. 17 A. What is the difference? 18 Q. 18 MR. PRUITT: Object to form. Foundation. 50-2 has additional treatment with a poly Al 19 19 20 which provides better dispersion which usually 20 improves gloss a little bit. So I think 50-2 is 21 21 usually better for gloss but both of them could be 22 22 23 used. 23 So CR -- CR-50 -- 50 and 50-2 are both 24 Q. 24 25 chloride TiO2? 25 94 96 1 A. Yes, they are. 1 2 You can't make those grades with sulfate --2 Q. 3 3 with the sulfate process, can you? MR. PRUITT: Object to form. 4 4 THE WITNESS: They would be -- we couldn't 5 5 6 make an equivalent grade. There would be 6 7 differences. 7 8 BY MR. EDMONDSON: Okay. And which of your 8 9 customers buy the CR-50 and CR-50-2 grades? 9 10 10 11 I wanted to ask you, if you can think of the 11 Can you recall offhand roughly how much 12 12 manufacturers that ICUSA competes with in selling its 13 product TiO2 you sell in these grades to CR-50 and 50-2 products to manufacturers of interior 13 14 high-gloss paints. Which manufacturers are your 14 15 I'd have to check to be sure. I would guess principal competitors? 15 16 maybe our TiO2 is probably that 16 17 type. 17 For interior high-gloss paints? 18 Q. 18 19 At least usage of CR-50 and 50-2. I'm not 19 Are you aware whether Lomon Billions has any 20 sure what all the applications would be. There is a 20 product that is competitive with CR-50-2 and CR-50 number of applications where they could use those. 21 21 for -- in this market for interior high-gloss paints? One of the main ones would be interior high gloss. 22 22 I'm not familiar enough with their grades to 23 Do you recall the names of the 23 be able to say. 24 purchase this 24 So your testimony is you are not aware that product? 25 25 they have any business in the US - for this end use?

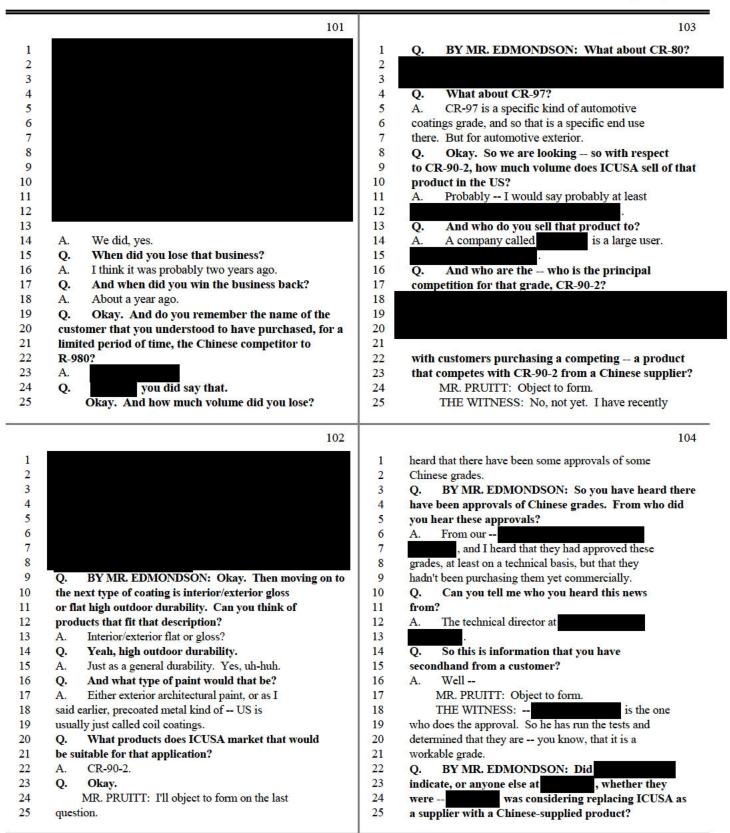
24 (Pages 93 to 96)

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25 (Pages 97 to 100)

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26 (Pages 101 to 104)

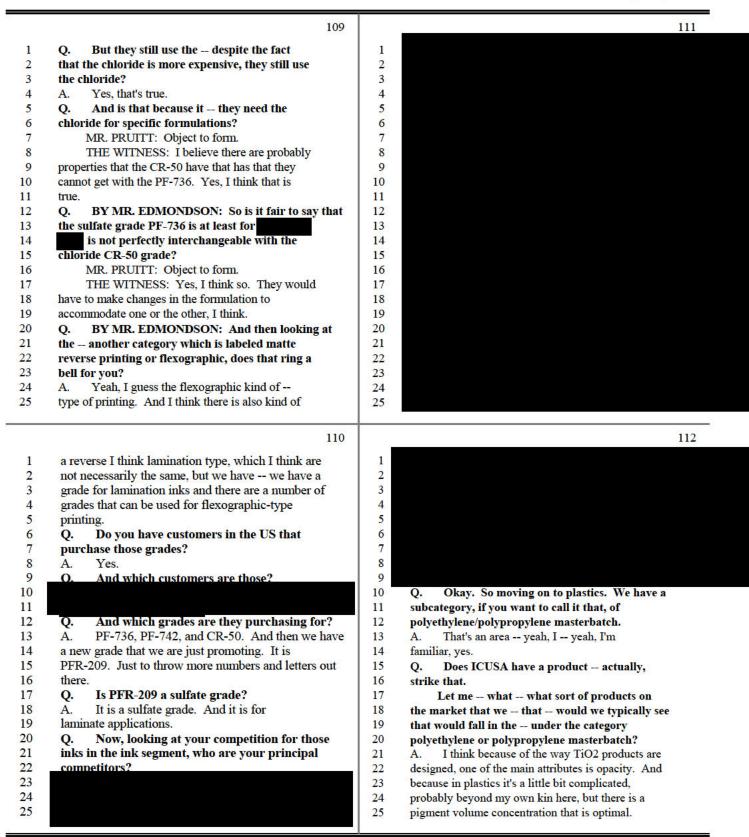
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105 107 He didn't indicate anything like that. But most common use there. And then also -- which is the 1 1 2 2 he just said that the quality has gotten better chloride type. And then on the sulfate type we have 3 because in the past he had tested their grades and 3 4 they were -- he didn't approve them, but that in this 4 Q. Do you sell CR-57 for use in glossy inks? last conversation we had he said they had been 5 I don't think so. 5 A. 6 Okav. 6 Q. 7 I can't think of anywhere we do. 7 The next grade of -- or application of A. O. 8 What about CR-50-2? 8 coating that we are looking at is exterior gloss or Q. flat, highest outdoor durability. What types of CR-50-2 is sometimes used; for some reason 9 9 A. 10 paints would that cover? 10 that I'm not clear on ink companies prefer CR-50 to 11 Yeah, then we are getting into some more 11 CR-50-2. Paint companies tend to prefer CR-50-2 to A. 12 rarified atmosphere, I guess. So it depends on 12 CR-50. But I think it has to do with some oil 13 absorption properties. But I'm not a chemist or 13 how -- I think that -- in my experience, I think formulator, so I'm not sure exactly why that is. 14 there is a Chemours grade TS 6200 that I think is 14 seen as a -- one of the premier grades there. And But, yeah, because of that, I think most of 15 15 then from our side, we have PFC-105. And that is the 16 the ink companies that are using that type of 16 main one that we are promoting for -- the same as we material buy CR-50. 17 17 said earlier on superdurable. I think that is 18 18 Do you have any idea how much PF-736 ICUSA 19 19 probably the same. sells in the US for use in manufacturing glossy inks? 20 This is an example of a superdurable grade? 20 Yeah, we probably sell --Q. per month, I would say. 21 A. 21 Do you have any hint of competition from 22 And how much of the CR-50 do you sell for 22 Q. 23 Chinese suppliers in this superdurable grade? 23 use in glossy inks? No, we don't. 24 24 25 MR. PRUITT: Object to form. per month. 25 106 108 1 BY MR. EDMONDSON: And then looking at flat 1 What customers purchase the CR-50 for use in 2 emulsion paints or dry hide paints. What does that 2 glossy inks? 3 3 mean to you? A. purchases both CR-50 and MR. PRUITT: Object to form. 4 4 PF-736. THE WITNESS: Typical kind of wall paints, I 5 5 Are they the only customers purchasing -Q. think, that -- where the main property is opacity or They are the largest one. We also have some 6 6 A. hiding the surface that the paint is covering. 7 7 smaller customers. also purchases PF-736. 8 BY MR. EDMONDSON: Does Ishihara have any 8 Now, turning to You said that Q. 9 grades that you sell that - in the US market that go 9 they purchase both the CR-50 and the PF-736? 10 into those products? 10 11 In roughly what quantities? 11 Q. 12 12 13 13 14 14 15 15 Okay. So moving on to inks, another area of 16 16 application. What does a glossy ink look like? What 17 17 18 sort of products are we talking about there? 18 19 A. Probably packaging inks. 19 the sulfate grade and some of the chloride grade 20 20 Like what sort of package, if you can think instead of all one or the other? Q. 21 21 of anything? 22 Like a can of soda or something like that. 22 23 What grades, if any, does ICUSA market in 23 O. 24 the US that go into gloss inks? 24 I think -- I think CR-50 is probably the 25 25

27 (Pages 105 to 108)

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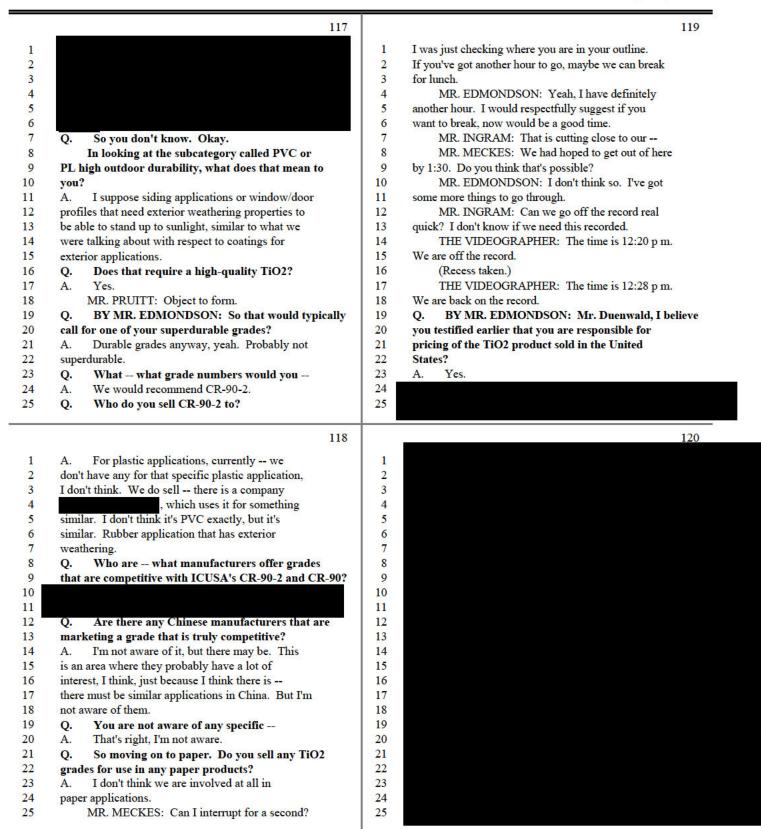
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There's -- let me put it this way. There is a Okay. And looking at the plastic category, pigment size that is optimal for various blown film or cast film -pigment-loading concentrations, I guess. (Reporter interruption.) And so if you have a very high-loading -- a BY MR. EDMONDSON: Blown film or cast film, lot of pigment, counterintuitively, I think a larger does that ring a bell? particle size is more efficient. With larger I don't know so much about that particular particles you can use less TiO2 to get the same application. degree of high. Q. So you're not aware that any -- any --So then for paint and coatings, generally a I wouldn't know of any specialty grades for A. so-called medium-size particle size is optimal, and that. I would just assume it is probably typical for plastic it's a smaller particle size. plastic grades because I think the pigment volume So I think the main thing that the grade concentration in those kinds of products would be that would be designed for those applications in similar. And so I think it would also be, for us at polypropylene, polyethylene, kind of general use least, CR-60-2 type. plastics would be the smaller particle size. The And would CR-60-2 also apply to flexible PVC difference isn't very big. It's -- medium being or plastisol? about 0.25 microns, small about 0.21 or so, large A. Yes. being probably like 0.28 or 0.29. Q. And which customers purchase CR-60-2 for What grades does --flexible PVC or plastisol? A. For us it would be the CR-60 or CR-60-2. And how much of the CR-60 and CR-60-2 does ICUSA sell for use in polyethylene or polypropylene masterbatch?

29 (Pages 113 to 116)

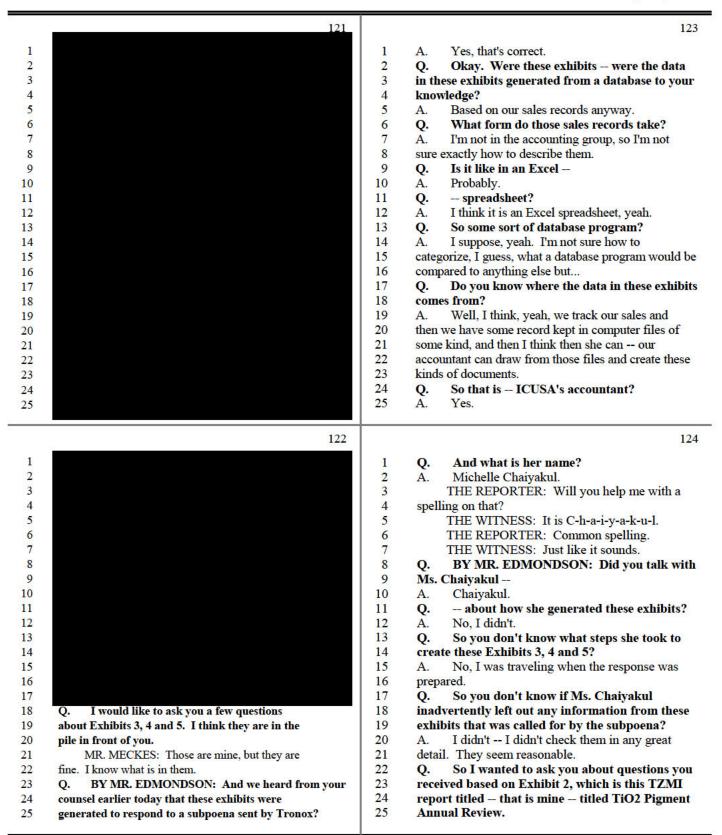
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31 (Pages 121 to 124)

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	125		127
1	A. Yes.	1	A. No, I don't.
2	MR. PRUITT: I'm going to reach over here,	2	Q. You don't call on any customers in
3	if that is all right.	3	Australia?
4	MR. EDMONDSON: Yeah, these are yours.	4	A. No.
5	Definitely.	5	Q. Okay. Do you recall earlier today that you
6	MR. PRUITT: Thank you.	6	agreed with or counsel asked you if you agreed
7	Q. BY MR. EDMONDSON: Tronox counsel asked you	7	with the statement on the first paragraph, page 207,
8	some questions about page 207 of the exhibit.	8	that ISK is now facing much more intense competition
9	A. Okay.	9	from newer pigment plants in China, Australia,
10	MR. PRUITT: 2015?	10	Malaysia and Taiwan?
11	Q. BY MR. EDMONDSON: Yeah, it is this TZMI	11	A. Yes.
12	A. 2011.	12	Q. And you agreed with that statement?
13	MR. PRUITT: Okay. 2011.	13	A. I did, yes.
14	Q. BY MR. EDMONDSON: Start right there.	14	Q. But you don't do any business in that part
15	Now, first I just want to confirm, you	15	of the world?
16	don't or ICUSA doesn't subscribe to TZMI's	16	A. I don't, no.
17	reports?	17	Q. So
18	A. No, we don't.	18	MR. PRUITT: Object to form. Misstates.
19	Q. Do you ever receive those in the ordinary	19 20	Q. BY MR. EDMONDSON: You don't have any
20	course of business?	20	personal experience with selling in that region? A. That's correct, I don't.
21 22	A. No, we don't.	22	MR. PRUITT: Object to form. Misstates.
23	Q. So you don't typically review A. That's correct.	23	Q. BY MR. EDMONDSON: And you don't have
24	Q. Okay. And just to be clear, your prior	24	responsibility for — or personal knowledge of how
25	to working for ICUSA, had you did you have any	25	ISK's business is doing in that part of the world, do
	126		128
1	experience in the TiO2 industry?	1	you?
2	A. No, I didn't.	2	A. That's right, I don't.
3	Q. So your entire experience in TiO2 sales is	3	MR. PRUITT: Object to form.
4	working for ICUSA?	4	Q. BY MR. EDMONDSON: And counsel for Tronox
5	A. Yes.	5	asked you questions about
6	Q. So you know your company's position in the	6	
7	TiO2 market, right?	7	· · · · · · · · · · · · · · · · · · ·
8	A. Right.	8	A. Yes.
9	Q. But beyond that	9	Q. And you provided some testimony about what
10	A. My experience is all with Ishihara.	10	you understood the nature of that agreement to be?
11	Q. It is just with Ishihara.	11	A. Yes.
12	You don't have experiences in analysis of	12	Q. It was a licensing agreement of sorts?
13	the TiO2 market as a whole?	13	A. Yes.
14	A. That's correct.	14	Q. But the information you have you got from,
15 16	Q. And any information you have on sales by	15 16	you said, engineers with ISK? A. Yes. It is hard to know I guess since it is
17	competitors to your company comes from sources outside the — your company, right?	17	A. Yes. It is hard to know I guess since it is kind of old history, but since I have been with the
18	MR. PRUITT: Object to form.	18	company I have been aware
19	THE WITNESS: I'm not sure	19	company i nave occii awaic
20	Q. BY MR. EDMONDSON: Let me rephrase. We'll	20	
21	move on.	21	
22	You have testified earlier that you only	22	So I have talked with them.
23	call on customers in North America; is that correct?	23	Q. And where are those engineers based?
24	A. Yes, that's correct.	24	A. In Yokkaichi.
25	Q. You don't call on any customers in Asia?	25	Q. They are Japanese?
23	Q. Tou don't can on any customers in Asia:	25	Q. They are Japanese:

32 (Pages 125 to 128)

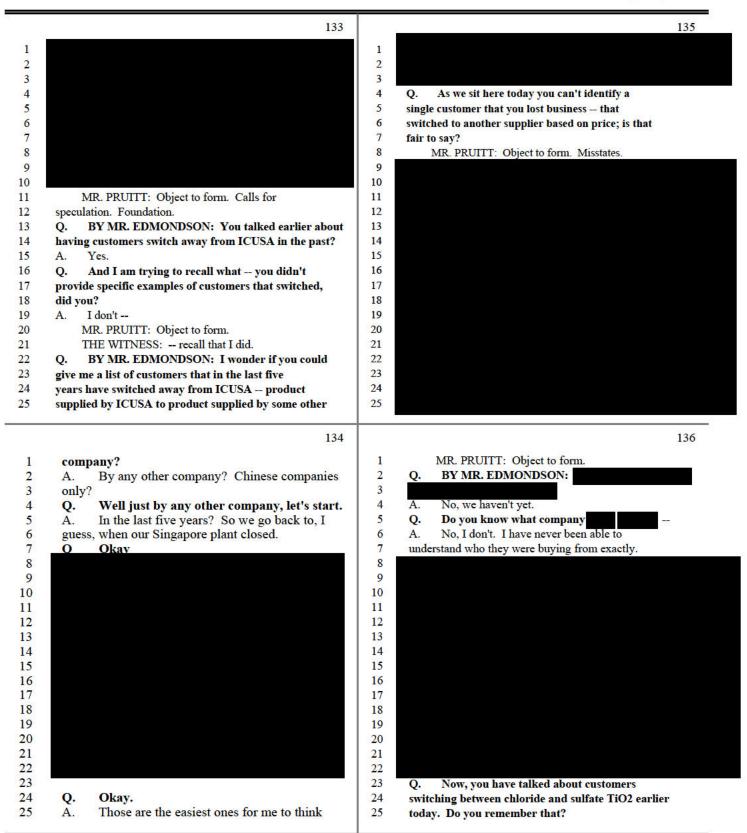
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1	A. Japanese, yes.	1 Q. And is it your understanding that that	
2	Q. So if we wanted to know the details of that	2 dramatic increase in the price of ilmenite in China	
3	agreement, we would need to talk to the engineers in	3 has left Chinese producers without the same cost	
4	Yokkaichi?	4 advantage that they had in 2014?	
5	 A. That's probably true. In 1969 there 	5 A. I have heard that, yes.	
6	probably aren't a lot of them left.	6 MR. PRUITT: Object to form.	
7	Q. Okay. I would like you to take a look at	7 Q. BY MR. EDMONDSON: And you testified earlier	N.
8	Exhibit 1, please, which is a TZMI report titled TiO2	8 that ISK had a — used to have a TiO2 plant in	
9	Pigment Annual Review, a Review of 2014.	9 Singapore?	
10	Now I have got a couple of quick questions	10 A. Yes.	
11	about something written on page 7 of the document.	11 Q. But that that was shut down in 2014?	
12	A. 70?	12 A. 2013.	
13	Q. 7.	13 Q. 2013. And you said it was shut down because	
14	A. 7. Okay.	14 of high costs?	
15	Q. Specifically, paragraph 4, Section 2.5 which	15 A. Yes.	
16	is titled Overview of the market in 2014.	16 Q. And I think you used the phrase high costs	
17	A. Okay.	17 in Singapore?	
18	Q. It this paragraph begins as follows: All	18 A. Yes.	
19	feedstock costs were declining throughout most of	19 Q. Is Singapore particularly high-cost in	
20	2014, but sulfate ilmenite in the China market	20 comparison	
21	decreased more than other products, allowing the	21 A. I believe so, yeah. I haven't worked at the	
22	Chinese producers to lower costs and export products	plant, but yeah, I believe so.	
23	to markets where there was a value in use arbitrage.	23	
24 25	Do you see that sentence? A. Yes.	24	
23	A. Yes.	25	
	10/2009	00.000	. 2
	130	132	
1	Q. Now, you spoke or testified earlier that	132	
1 2		NOOTE OF	
	Q. Now, you spoke or testified earlier that	1	
2	Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process.	1 2 3 4	
2	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall 	1 2 3	
2 3 4	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? 	1 2 3 4 5 6	
2 3 4 5	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't 	1 2 3 4 5 6 7	
2 3 4 5 6 7 8	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't know. I think they probably do though, yes. 	1 2 3 4 5 6 7 8	
2 3 4 5 6 7 8 9	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't know. I think they probably do though, yes. Q. They did in was it your experience that 	1 2 3 4 5 6 7 8	
2 3 4 5 6 7 8 9	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't know. I think they probably do though, yes. Q. They did in was it your experience that Chinese producers in 2014 had cost advantage in 	1 2 3 4 5 6 7 8 9	
2 3 4 5 6 7 8 9 10	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't know. I think they probably do though, yes. Q. They did in was it your experience that Chinese producers in 2014 had cost advantage in sulfate-process TiO2? 	1 2 3 4 5 6 7 8 9 10	
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2 3 4 5 6 7 8 9 10 11 12 13	 Q. Now, you spoke or testified earlier that Chinese producers had a cost advantage with their sulfur A. Sulfate process. Q. Yeah, sulfate-process TiO2. Do you recall that? A. I don't recall talking about it, but I don't know. I think they probably do though, yes. Q. They did in was it your experience that Chinese producers in 2014 had cost advantage in sulfate-process TiO2? MR. PRUITT: Object to form. Mischaracterizes. 	1 2 3 4 5 6 7 8 9 10 11 12 13	
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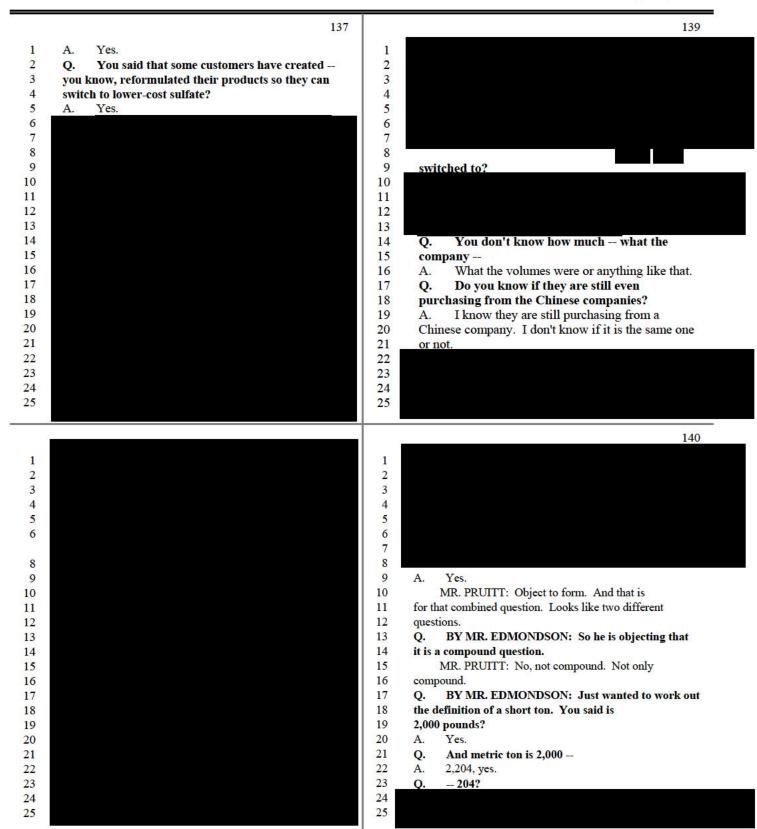
33 (Pages 129 to 132)

Tronox and Cristal 3/21/2018



34 (Pages 133 to 136)

Tronox and Cristal 3/21/2018



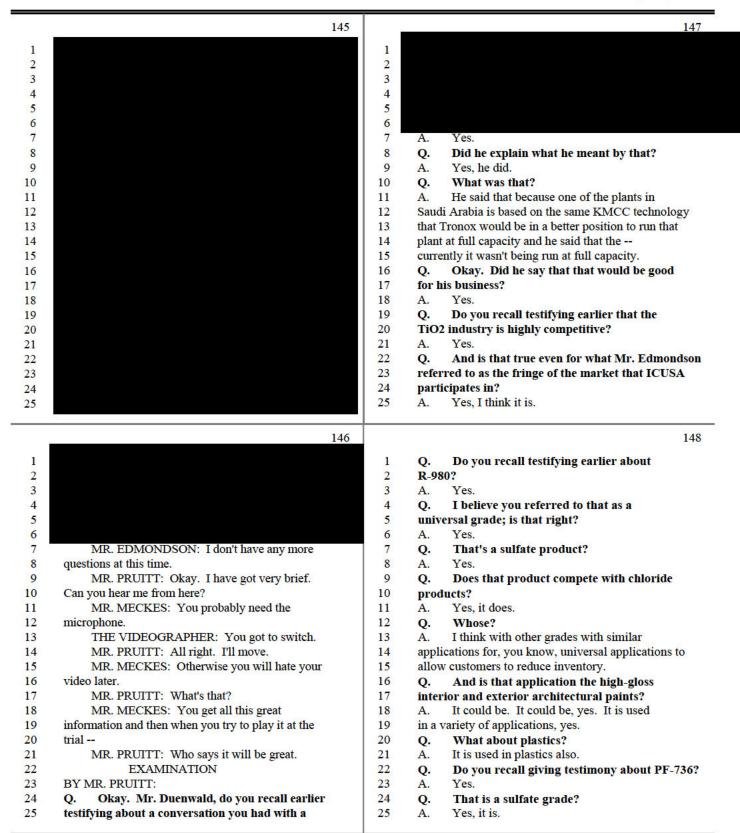
35 (Pages 137 to 140)

Tronox and Cristal 3/21/2018

141 143 2016 from a Chinese supplier? 1 1 Q. And they will have to pay the duty? 2 2 I don't know -- no, I think --A. Yes, that's right. don't have a real recollection of that company at 3 3 O. And that duty could go up if the all, and that is why I said if they bought something 4 administration chooses to raise the duty; is that it wasn't enough for me to even remember it. So it 5 accurate? was probably a sample. 6 6 That is a possibility. 7 You testified that you agreed with Tronox 7 MR. PRUITT: Object to form. 8 8 counsel's statement that the TiO2 industry is MR. EDMONDSON: I wonder if we can take a 9 competitive; is that accurate? 9 brief break? I can see if I can wrap questions up. 10 10 MR. MECKES: Sure. A. 11 O. But you also testified that the industry is 11 MR. EDMONDSON: Try to get us out of here by 12 consolidating? 12 1:30. 13 A. Yes. 13 THE VIDEOGRAPHER: Don't forget your So there are fewer competitors to have to 14 O. 14 microphones, please. 15 worry about; is that accurate? 15 This is the end of Video Number 2 of Volume There are fewer competitors out there, I 16 1 of the deposition of David Duenwald on March 21st, 16 would say that is true from when I started to where 17 17 we are today, yes. 18 18 The time is 1:03 p m. 19 We are off the record. 19 And if the proposed acquisition of Cristal by Tronox goes through, that would be one fewer 20 20 (Recess taken.) company that ICUSA has to compete against in the US, THE VIDEOGRAPHER: This is the beginning of 21 21 22 22 Video Number 3 of Volume 1 of the deposition of David MR. PRUITT: Object to form. Foundation. 23 23 Duenwald on March 21st, 2018. 24 Calls for speculation. 24 The time is 1:10 p m. 25 THE WITNESS: There would be. 25 We are back on the record. 142 144 1 1 BY MR. EDMONDSON: So I just wanted to 2 2 confirm a couple of things about customers' ability 3 3 to switch between chloride and sulfate TiO2. 4 4 Is it fair to say that customers for major 5 5 applications have difficulty switching between sulfate and chloride grades? 6 6 7 7 I would say yes. 8 8 MR. PRUITT: Object to form. 9 THE WITNESS: That is probably true. 9 That --A. 10 BY MR. EDMONDSON: And by major applications 10 Q. - that you are aware of? (Nods head.) 11 that would be -- that would be applications that 11 12 manufacturers sell based primarily on color 12 13 properties? 13 14 A. Yes. 14 15 Q. Like paints? 15 16 MR. PRUITT: Object to form. Misstates. 16 A. 17 BY MR. EDMONDSON: And Lomon Billions 17 Okay. And those are the companies that produces all of its TiO2 overseas; is that accurate? 18 would have the most trouble reformulating their 18 19 product to take sulfate grades, right? 19 A. 20 MR. PRUITT: Object to form. Foundation. 20 Q. So it has to ship its product to the US just THE WITNESS: I would suppose so, yes, based 21 as ISK ships its product to ICUSA? 21 22 Yes, that's true. 22 on my understanding. 23 And so Lomon Billions is incurring shipping 23 Q. 24 costs? 24 25 25 Yes. A.

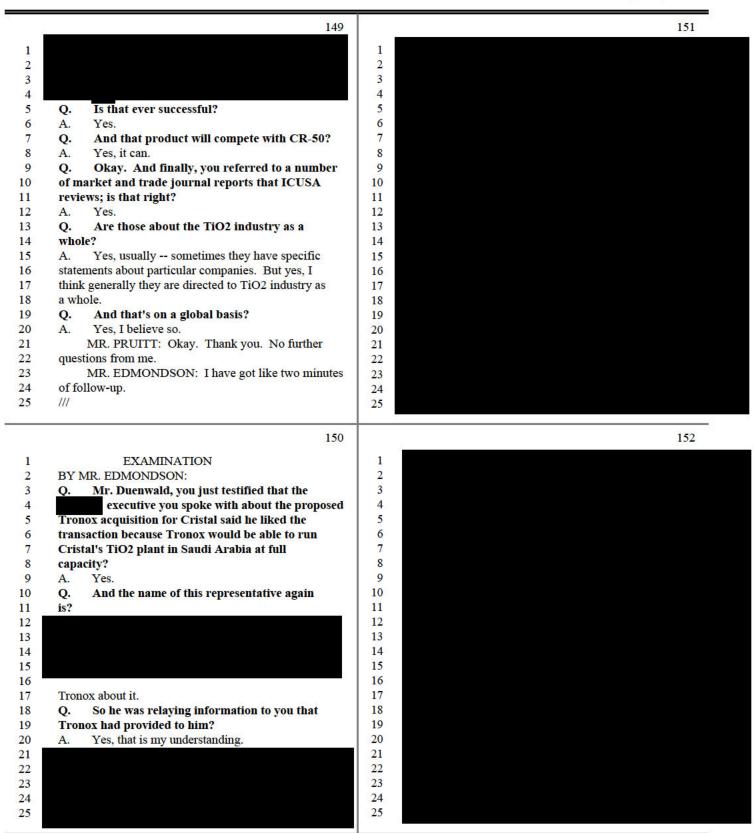
36 (Pages 141 to 144)

Tronox and Cristal 3/21/2018



37 (Pages 145 to 148)

Tronox and Cristal 3/21/2018



38 (Pages 149 to 152)

Tronox and Cristal 3/21/2018

	153		155
1		1	DECLARATION UNDER PENALTY OF PERJURY
1 2		2	DECLARATION UNDER PENALTT OF PENJORT
3	MR. EDMONDSON: No further questions.	3	Case Name: TRONOX LIMITED, a Corporation and CRISTAL
4	MR. HONG: I have just got about 20 more	4	USA, INC., a Corporation
5	minutes. No, I'm kidding. We are all done.	5	Date of Deposition: Wednesday, March 21, 2018
6	THE WITNESS: Okay. Thank you.	6	Job No: 60176
7	THE VIDEOGRAPHER: Don't forget your	7	
8	microphones, please.	8	I, David Duenwald, hereby certify under
9	MR. MECKES: We are off the record.	9	penalty of perjury under the laws of the State of
10	THE VIDEOGRAPHER: This is the end of Video	10	California that the foregoing is true and correct.
11	Number 3, and this concludes Volume 1 of the	11	Executed this day of,
12	deposition of David Duenwald on March 21st, 2018.	12	2018, at
13	The original video will be retained by For	13	2013, 11
14	the Record, Inc.	14	
15	The time is 1:22 p m.	15	
16	We are off the record.	16	DAVID DUENWALD
17	(The deposition concluded at 1:22 p.m.)	17	
18	(1110 deposition constitute at 1122 p.m.)	18	
19		19	
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1		١,	
1 2	I, the undersigned, a Certified Shorthand	1	DEPOSITION ERRATA SHEET
2	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do	1 2	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation
2	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify:	2	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald
2 3 4	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken	5339	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018
2 3 4 5	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth;	2	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176
2 3 4 5 6	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings,	2	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record.
2 3 4 5	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth;	2	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record. 2. To conform to the facts.
2 3 4 5 6 7	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were duly sworn; that a record	3 4	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record.
2 3 4 5 6 7 8	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were duly sworn; that a record of the proceedings was made by me using machine shorthand, which was thereafter transcribed under my direction; that the foregoing transcript is a true	2 3 4 5 6 7	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record. 2. To conform to the facts. 3. To correct transcription errors. PageLineReason Fromto
2 3 4 5 6 7 8 9 10 11	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were duly sworn; that a record of the proceedings was made by me using machine shorthand, which was thereafter transcribed under my direction; that the foregoing transcript is a true record of the testimony given.	2 3 4 5 6 7 8	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record. 2. To conform to the facts. 3. To correct transcription errors. Page Line Reason From to Page Line Reason
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	I, the undersigned, a Certified Shorthand Reporter, in and for the State of California, do hereby certify: That the foregoing proceedings were taken before me at the time and place herein set forth; that any witnesses in the foregoing proceedings, prior to testifying, were duly sworn; that a record of the proceedings was made by me using machine shorthand, which was thereafter transcribed under my direction; that the foregoing transcript is a true record of the testimony given. Further, that if the foregoing pertains to the original transcript of a deposition in a federal case, before completion of the proceedings, review of the transcript {XX} was {} was not required. I further certify I am neither financially interested in the action nor a relative or employee	2 3 4 5 6 7 8 9 10 11 12 13 14 15	DEPOSITION ERRATA SHEET Case Name: TRONOX LIMITED, a Corporation and CRISTAL USA, INC., a Corporation Name of Witness: David Duenwald Date of Deposition: March 21, 2018 Job Number: 60176 Reason Codes: 1. To clarify the record. 2. To conform to the facts. 3. To correct transcription errors. Page Line Reason From to
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20	the transcri	pt is true	and correct.		
21	No c	changes h	ave been ma	de. I certify that	the
	transcript is	s true and	correct.		
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CONFIDENTIAL

ERRATA SHEET

Case Name:

In the matter of Tronox Limited et al., FTC Docket No. D09377

Witness Name:

David Duenwald

Deposition Date:

March 21, 2018

Designation:

Confidential

]	PAGE	LINE(S)	CORRECTION	REASON	
6	53	5	Change "of Ishihara" to "or Ishihara"	Transcription error	
{	31	11-12	Change "and department counsel for Ishihara" to "the general counsel for Ishihara"	Transcription error	
	112	24	Change "kin" to "ken"	Transcription error	
	113	8	Change "high" to "hide"	Transcription error	

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 3129

2018 at San Francisco

David Duenwald

010-8612-6165/1/AMERICAS

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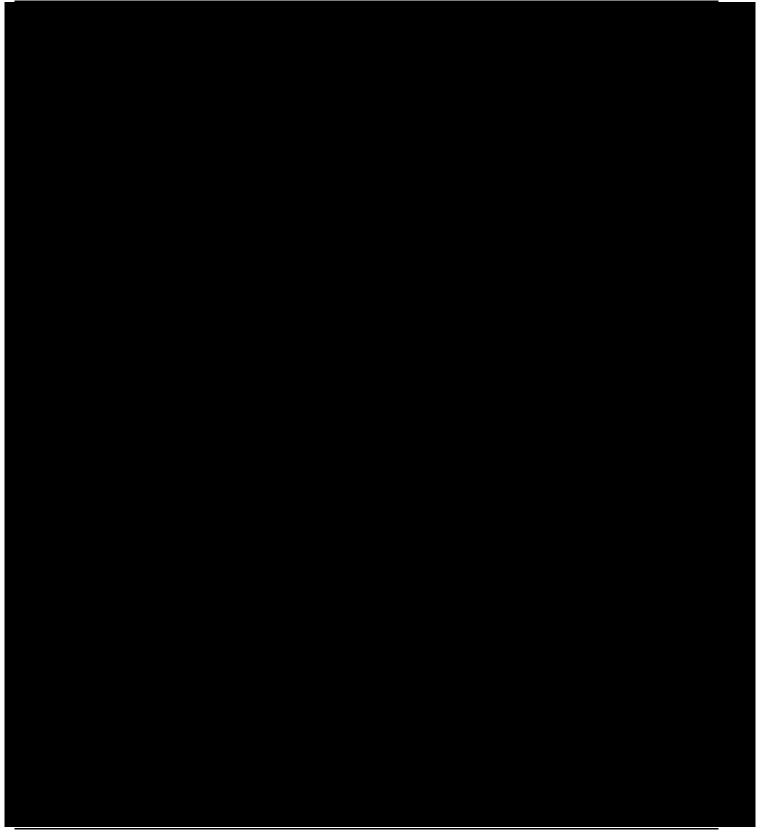
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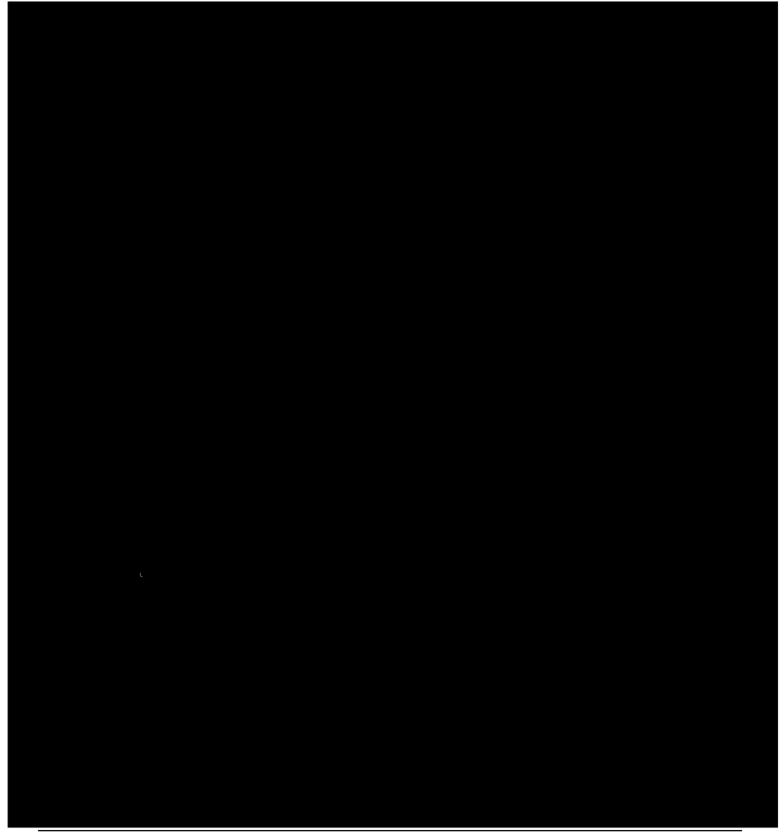
Duenwald

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Duenwald

Tronox and Cristal 3/21/2018

[177]



Notice of Electronic Service

I hereby certify that on May 04, 2018, I filed an electronic copy of the foregoing Non-Party Ishihara Corporation (U.S.A.)'s Motion for in Camera Treatment, with:

D. Michael Chappell Chief Administrative Law Judge 600 Pennsylvania Ave., NW Suite 110 Washington, DC, 20580

Donald Clark 600 Pennsylvania Ave., NW Suite 172 Washington, DC, 20580

I hereby certify that on May 04, 2018, I served via E-Service an electronic copy of the foregoing Non-Party Ishihara Corporation (U.S.A.)'s Motion for in Camera Treatment, upon:

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