IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

FEDERAL TRADE COMMISSION, Plaintiff, v. **TRONOX LIMITED, et al.,** Defendants.	Civil Action No. 18-1622 (TNM) **FILED UNDER SEAL**

SECOND CORRECTED REPLY MEMORANDUM IN SUPPORT OF PLAINTIFF'S MOTION FOR A PRELIMINARY INJUNCTION PURSUANT TO SECTION 13(B) OF THE FEDERAL TRADE COMMISSION ACT

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Other Authorities

Defendants criticize the FTC's case for being "artificial, largely academic, and inconsistent with real world evidence."[1] But "real-world evidence" is precisely what the FTC has presented. The FTC has provided the trial testimony of the three largest customers of TiO2 in North America—Sherwin-Williams, PPG, and Masco—along with testimony from other customers. The FTC has provided the trial testimony of Kronos, a competing TiO2 supplier. The FTC has cited to Defendants' own contemporaneous documents and public statements to investors. Each of these sources of real-world evidence paints a consistent picture: that North American customers demand chloride TiO2 and will not switch to sulfate; that TiO2 pricing differs regionally; that customers cannot defeat those regional price differences through arbitrage; and that the merger is likely to lead to higher prices and less output. The previous court decisions highlighting the history of anticompetitive conduct in the TiO2 industry only heighten the concerns raised by the merger.[2] This extensive real-world evidence presented by the FTC undoubtedly "raise[s] questions going to the merits so serious, substantial, difficult and doubtful as to make them fair ground for thorough investigation, study, deliberation and determination by the FTC in the first instance and ultimately by the Court of Appeals." *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 714-15 (D.C. Cir. 2001) (citation and internal quotation marks omitted).

Defendants, by contrast, offer only the self-serving testimony of their own executives and paid expert witnesses. Defendants have not offered a single declaration by a customer or industry participant in support of the merger. Defendants did not call any customers, competitors, or other third parties to testify at the administrative trial. Moreover, the testimony offered by Defendants' executives and experts is inconsistent with Defendants' own documents, inconsistent with

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[1] Defendants' Opposition to Preliminary Injunction ("Defs.' Br.") at 2.
[2] *Valspar Corp. v. E. I. Du Pont De Nemours & Co.*, 873 F.3d 185 (3d Cir. 2017); *In re Titanium Dioxide Antitrust Litig.*, 959 F. Supp. 2d 799 (D. Md. 2013).

Defendant Tronox's public statements to its investors, inconsistent with the previous court decisions analyzing the industry, and inconsistent with the view of other industry participants that provided declarations and testified at trial. Finally, Defendants' assertions that they have been treated "unfairly" are legally baseless, factually wrong, and in any event, do not outweigh the significant public equities in favor of granting a preliminary injunction to allow the Commission the opportunity to decide this case on the merits.

I. THE RELEVANT ANTITRUST PRODUCT MARKET IS CHLORIDE TIO2

Defendants assert that the relevant product must include both sulfate and chloride TiO2 because the two products are "interchangeable in the vast majority of applications." Defs.' Br. at 12. But the fact that—as a technical matter—a company can make paint (for example) with chloride or sulfate TiO2 says nothing about the proper antitrust market. *Customers* in North America generally do not make paint with sulfate TiO2 because U.S. and Canadian consumers will not buy it.[3] Instead, U.S. and Canadian consumers demand the brighter whites and colors, durability, and better coverage that only higher-quality paint made with *chloride* TiO2 can provide.[4] As a result, North American TiO2 customers—such as paint and plastics companies—overwhelmingly buy chloride TiO2, and will not substitute sulfate TiO2 even though it is less expensive than chloride TiO2.[5] Indeed, the evidence shows that sulfate TiO2 has been as much

[3] *See, e.g.*, Memorandum in Support of Plaintiff's Motions For a Temporary Restraining Order and For a Preliminary Injunction Pursuant to Section 13(b) of the Federal Trade Commission Act ("Pl.'s Mem.") at 12-15; Trial Tr. 778:23-782:8; [redacted]

[4] Pl.'s Mem. at 12-14; [redacted] Trial Tr. 642:22-643:10; [redacted] (Young, Sherwin-Williams); [redacted] Trial Tr. 776:23-777:8, 778:23-782:8 (Christian, Kronos).

[5] Pl.'s Mem at 12-15; *see also, e.g.*, [redacted] Trial Tr. 647:17-648:18 (Young, Sherwin-Williams) (Sherwin-Williams has consistently paid more

as [redacted] cheaper than chloride TiO2, but customers still have not switched to sulfate TiO2.[6] Chloride TiO2 has for years consistently accounted for about [redacted] of all North American rutile TiO2 purchases.[7]

That is the key point for antitrust analysis. As set forth in the Federal Trade Commission and U.S. Department of Justice Horizontal Merger Guidelines ("*Merger Guidelines*"), the antitrust question is whether customers in North America would substitute sulfate TiO2 for chloride TiO2 in sufficient volumes to render a small but significant non-transitory increase in price ("SSNIP") unprofitable. *Merger Guidelines* § 4.1.1. The evidence described above shows that the answer to that question is resoundingly no. Defendants point out that some North American customers do buy both chloride and sulfate TiO2. Defs.' Br. at 12. But they fail to mention that those customers use sulfate TiO2 only for [redacted].[8] As noted above, those customers cannot use sulfate TiO2 more broadly because North American consumers will not allow it. [redacted].[9] This real world evidence makes clear that North American customers do not meaningfully substitute

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for chloride TiO2 because chloride TiO2 is required to "consistently meet [its]customers' requirements for quality and performance"); Trial Tr. 1093:14-1094:1 (Arrowood, Deceuninck) (plastics customer: "[T]he only way that Deceuninck would even consider sulfate TiO2 would be if chloride TiO2 was unavailable."); [redacted]

[6] Pl.'s Mem. at 15-17.

[7] *Id.* at 15.

[8] *Id.* For instance, Defendants cite to testimony that [redacted]. But these customers testified that they only use sulfate TiO2 in [redacted] Pl.'s Mem. at 15 n.44; Trial Tr. 643:15-23, [redacted] (Young, Sherwin-Williams);

[9] [redacted]

sulfate TiO2 for chloride TiO2.

Defendants argue that the Court should disregard customer testimony in its analysis of the evidence. Defs.' Br. at 6-7. But customers' testimony about their own businesses, how they buy and use the relevant product, and their ability to substitute to other products is critical: "[c]ustomers typically are the best source, and in some cases they may be the only source, of critical information on the factors that govern their ability and willingness to substitute in the event of a price increase." *Commentary on the Horizontal Merger Guidelines* at 9 (2006). Indeed, the *Merger Guidelines* themselves recognize the importance of customer testimony on a host of issues, including "their own purchasing behavior and choices," "how they would likely response to a price increase," and "the relative attractiveness of different products and suppliers." *Merger Guidelines* § 2.2.2. Courts routinely rely upon third party testimony to gain an understanding of the market. *FTC v. Staples*, 190 F. Supp. 3d 100, 119 (D.D.C. 2016) (citing customer testimony as evidence of pricing); *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 32 (D.D.C. 2015) (using customer testimony as evidence of the proper product market); *United States v. H&R Block*, 833 F. Supp. 2d 36, 74-75 (D.D.C. 2011) (relying upon competitor testimony to understand market dynamics). It is precisely this type of customer testimony that Plaintiff provided in this case.[10]

II. THE RELEVANT GEOGRAPHIC MARKET IS NORTH AMERICA

As with Defendants' proposed product market, the global geographic market urged by Defendants is one that North American chloride customers would not recognize. The purpose of

[10] Defendants' reliance on *United States v. AT&T*, No. 17-2511, 2018 WL 2930849 at *33, *38 (D.D.C. June 12, 2018) is misplaced. In *AT&T*, the judge also found that third-party testimony "can provide the Court with insight into the nature of the industry and a proposed transaction's potential effects in the market." *Id.* at *38. The concern in that case was that much of the testimony consisted of "speculative concerns" rather than factual market realities. *Id.* at *39. No such concerns are present here.

market definition is to determine the scope of the geographic area where customers "can practically turn for alternative sources of the product." *FTC v. Cardinal Health, Inc.*, 12 F. Supp. 2d 34, 49 (D.D.C. 1998) (citations omitted). But Defendants refuse to acknowledge the overwhelming evidence that suppliers can and do charge different prices to North American chloride customers than customers elsewhere, and that North American customers cannot defeat that price difference, including in the face of a SSNIP.

Defendants' own public investor statements and contemporaneous documents consistently acknowledge the regional nature of the North American market. Examples abound.[11] As Tronox's then-CEO explained to investors in 2014: "Are there different prices in the regional markets in which we do business? The answer to that question is yes. The European and Asian market prices and the Latin American market prices are relatively closely bunched, with the North American price staying somewhat higher."[12] In another investor call in 2015, he commented that "[w]e do not see that exports from China or from Europe are playing a material role in the competitive balance, particularly in the North American market."[13]

Internally, for example, Tronox has written that [redacted][14] and Tronox told a customer that [redacted][15] Cristal similarly recognizes that TiO2 pricing is "driven by supply and demand dynamics in … particular [geographic] regions,"[16] [redacted]

[11] *See* Pl.'s Mem. at 18-20.
[12] PX9008 at 008 (Tronox Q4 2014 Earnings Call); PX9001 at 007 (Tronox Q3 2016 Earnings Call).
[13] PX9006 at 006 (Tronox Q2 2015 Earnings Call).
[14] [redacted]
[15] [redacted]
[16] Trial Tr. at 2094:11-2095:3 (Stoll, Cristal).

[redacted]

Defendants contend that TiO2 is traded globally, Defs.' Br. at 8-9, but that is not the relevant question when defining the geographic market. The relevant antitrust question is where North American customers would turn for chloride TiO2 in the face of SSNIP.[17] Because chloride TiO2 suppliers can charge different prices in North America, the central question is whether customers can "avoid targeted price increases through arbitrage." *In re Polypore Int'l Inc.*, 150 FTC 586 at *16 (2010), *aff'd sub nom., Polypore Int'l, Inc. v. FTC*, 686 F.3d 1208 (11th Cir. 2012); *Merger Guidelines* § 4.2.2. But there is no evidence that customers arbitrage—by buying in another region and bringing it into North America, for example. Indeed, between 2012 and 2016 North American chloride TiO2 prices were significantly higher than in other regions.[18] If the TiO2 market were global, as Defendants suggest, then significant regional price differences should not persist across regions for such prolonged periods. Rather, they should be quickly competed away as customers turn to other regions for supply. But significant regional price differences have persisted, demonstrating the regional nature of TiO2 markets.

[redacted][19]

[17] *See, e.g., FTC v. Advocate Health Care Network*, 841 F.3d 460, 468 (7th Cir. 2016).

[18] [redacted]

[19] [redacted]

[redacted][20]

[redacted][21]

Defendants, without citing any evidence, also posit that "trade flows" respond to small variations in price among regions. Defs.' Br. at 10. But the evidence shows minimal increases in imports of chloride TiO2, even when North American prices were substantially above those in other regions.[22] Defendants' argument that trade flows establish a "global" antitrust market also misses the point. Plaintiff's market already includes *all* sales of chloride TiO2 delivered to North American customers from suppliers located *anywhere* in the world.[23] Imports account for only 3% of such sales, belying Defendants' contention that imports to North America are competitively significant.[24]

Next, Defendants claim that North American prices are "co-integrated" and move with global prices. Defs.' Br. at 9. But Tronox's Vice President of Sales for the Americas testified at trial—under questioning from his own counsel[redacted][25] Moreover, co-integration looks only at prices. But the antitrust question is whether customers change their purchases in response to relative price changes. Co-integration says nothing about that. Indeed, based on price movements, the same co-integration analysis performed by Defendants' economic expert would show that

[20] [redacted]

[21] [redacted]

[22] *See, e.g.*, Trial Tr. at 1774:16-1776:1 (Hill) (analysis finding no export and little import response to North American price changes).

[23] *Merger Guidelines* § 4.2.2; [redacted]

[24] [redacted]

[25] [redacted]

[redacted] but that is clearly wrong.[26] As the *Merger Guidelines* and case law recognize, the correct analysis to determine the relevant market is the hypothetical monopolist test, which assesses changes in purchases in response to a price increase.[27] If a market passes the hypothetical monopolist test—like the North American market does—this conclusively establishes a market for the purposes of antitrust analysis, regardless of whether prices are correlated or co-integrated.[28]

Defendants also argue that there are no regional prices for chloride TiO2, because they negotiate prices individually with customers. Defs.' Br. at 10. The relevant question is not, however, whether prices are individually negotiated, but whether suppliers can charge different prices to customers based on the customers' location.[29] As laid out in Plaintiff's opening brief, the record clearly establishes that TiO2 suppliers do. Pl.'s Mem. at 19-20. [redacted][30] [redacted]

[26] [redacted]

[27] *Merger Guidelines* § 4.1.1; *Sysco*, 113 F. Supp. 3d at 33; *Staples*, 190 F. Supp. 3d at 122-23.

[28] Defendants contend the FTC erred in applying the hypothetical monopolist test, by "giv[ing] the hypothetical monopolist control over supply both inside *and outside* the proposed relevant market." Defs.' Br. at 11 (emphasis in original). That is wrong. The *Merger Guidelines* specify that in a market based on the location of customers, as here, the hypothetical monopolist is defined as "the only present or future seller of the relevant product to customers in the region," and that all sales made to North American customers, "regardless of the location of the supplier making those sales" are attributed to the hypothetical monopolist. *Merger Guidelines* § 4.2.2. That is what Plaintiff did. Thus, for example—and contrary to Defendants' suggestion—the Chemours plant in Mexico is not excluded from the market. Rather, any sales from Chemours plant in Mexico to North American customers are properly captured in the Commission's relevant market. Defendants' incorrect argument is merely an effort to confuse the issue.

[29] *Merger Guidelines* § 4.2.2.

[30] [redacted] *see also, e.g.,* [redacted]

[redacted][31] And, as noted above, North American customers paid significantly more than customers in other regions from 2012 to 2016.[32]

Finally, Defendants' approach to market definition leads them to assert that Tronox faces [redacted] in North America. Defs' Br. at 14. But few of those firms have chloride TiO2 capability, [redacted] That absurd result—which no market participant would recognize as reflecting the real-world competitive environment in North America—is the product of their flawed approach to determining who the relevant market participants are, and makes the precise mistake that the *Merger Guidelines* caution against: "Defining a market broadly to include relatively distant product or geographic substitutes can lead to misleading market shares. This is because the competitive significance of distant substitutes is unlikely to be commensurate with their shares in a broad market." Merger Guidelines, §4.0. Indeed, another court criticized Defendants' expert, Dr. Shehadeh's conclusion as "not credible" when he similarly attempted to include distant competitors in the relevant market. *United States v. Bazaarvoice, Inc.*, No. 13-

[31] *E.g.*, [redacted]

[32] [redacted] *See* [redacted]

[33] *See, e.g.*, [redacted] PX1532 at 051 (TZMI Cost Study). [redacted]

00133, 2014 WL 203966, at *35 (N.D. Cal. Jan. 8, 2014).

III. THE MERGER WILL INCREASE THE LIKELIHOOD COORDINATION

The D.C. Circuit has made clear that "a central object of merger policy [is] to obstruct the creation or reinforcement by merger of such oligopolistic market structures in which tacit coordination can occur." *Heinz,* 246 F.3d at 725 (internal quotations omitted). Tacit coordination is particularly problematic because while not itself unlawful under Sections 1 or 2 of the Sherman Act, it "harms consumers just as a monopoly does." *Valspar*, 873 F.3d at 191. Merger law, therefore, is designed to prevent opportunities for coordinated conduct before they occur.

Coordinated conduct is a concern in this case because, as the Third Circuit observed, the TiO2 industry is an oligopoly characterized by "anticompetitive interdependence."[34] The merger will increase this anticompetitive interdependence by removing a major competitor, by increasing transparency, and by replacing a firm that has at times disrupted the oligopolistic interdependence with a firm that is committed to "market discipline."[35]

Defendants assert that coordinated conduct is implausible in this industry, but the evidence and prior court decisions show the opposite. [redacted][36] And through sources such as earnings calls, TZMI reports, and

[34] *Valspar*, 873 F.3d at 197; Pl.'s Mem. at 30-32. A federal court in Maryland went further, finding that "[t]he record contains ample evidence for concluding that the [d]efendants agreed to raise prices and shared commercially sensitive information [] to facilitate their conspiracy." *In re Titanium Dioxide Antitrust Litig.*, 959 F. Supp. 2d 799, 823 (D. Md. 2013).

[35] Pl.'s Mem. at 25-33; Trial Tr. at 281:2-16 (Malichky, PPG) (testifying that Tronox executive John Romano told him that "[redacted]" and that Cristal lacked "market discipline."). Defendants called Mr. Romano as a witness at the administrative trial, but Defendants' counsel never asked about these statements, leaving them unrebutted.

[36] *E.g.*, [redacted]; [redacted]. *See* [redacted]

price increase announcements, producers are able obtain a wealth of information regarding competitors' behavior, including specific information on output and price levels.[37] For example, internal Cristal business intelligence emails list "key" comments from competitors' earnings calls, including comments on price increase announcements and implementation, inventory levels, plant utilization rates, and expectations for future pricing.[38]

Similarly, Defendants' assertion of "fierce competition" misses the point. The existence of competition is not a defense to an otherwise anticompetitive merger. *See FTC v. CCC Holdings, Inc*., 605 F. Supp. 2d 26, 34-35 (D.D.C. 2009) (enjoining merger despite existence of "vigorous" competition); *United States v. H&R Block*, 833 F. Supp. 2d 36, 72 (D.D.C. 2011) (that there will be ongoing competition post-merger "is not necessarily inconsistent with some coordination"); *FTC v. Cardinal Health, Inc*., 12 F. Supp. 2d 34, 65 (D.D.C. 1998) (enjoining merger to preserve vigorous competition: "Over the past ten years, fierce competition among the four Defendants has led to falling prices."). Plaintiff is seeking to block the proposed merger to ensure that any competition that does exist is not diminished. *See CCC Holdings*, 605 F. Supp. 2d at 34-35 (observing that the FTC's merger challenge was intended to preserve the existing competition in the market).

Moreover, the TiO2 industry is not "fiercely competitive;" it is an oligopoly characterized by "anticompetitive interdependence." *Valspar*, 873 F.3d at 197. As set forth in Plaintiff's Memorandum, voluminous evidence shows that the industry is far from "fiercely competitive."[39]

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[37] *See* Pl.'s Mem. at 28-29; *see also* [redacted]

[38] PX2361 at 002, 004.

[39] Pl.'s Mem. at 30-32; *see, e.g.*, [redacted]

In particular, documents authored by Tronox's senior executives make clear [redacted] [40] Defendants ignore this ordinary course evidence, relying instead on self-serving testimony from their own executives. *In re The B.F. Goodrich Co.*, 1988 WL 1025464, at *94 (F.T.C. Mar. 15, 1988) ("Given the interest of industry participants in establishing that their industry is highly competitive, this sort of generalized testimony is not particularly probative."). [41] Moreover, customers have described a market in which parallel price increases are common, in which supply is tight, and in which they have had to accept a series of price increases. [42]

Finally, Plaintiff's coordinated effects case does not depend on an economic model, as Defendants assert. Plaintiff's economic models merely corroborate what the evidence establishes: that the merger is likely to substantially lessen competition. Indeed, because the merger will result in "a firm controlling an undue percentage share of the relevant market" with "a significant increase in the concentration of firms in that market," it is presumptively illegal. *Heinz*, 246 F.3d at 715 (citation and internal quotations omitted); *id.* at 715-16 ("Increases in concentration above certain levels are thought to 'raise[] a likelihood of interdependent

[40] *See* Pl.'s Mem. at 30-32; *see, e.g.*, [redacted]

[41] The ordinary course evidence that Defendants ignore is precisely the type of evidence the ALJ and Commission will rely on to evaluate the legality of this transaction. *See* Merger Guidelines § 2.2.1.

[42] Pl.'s Mem. at 30 n.101; [redacted] Trial Tr. 1085:17-1086:8 (Arrowood, Decueninck); PX7033 (Post (AzkoNobel) Dep. at 191:19-192:9); [redacted] *see also* PX9102 at 005 (Tronox's selling prices increased 26% from Q4 2016 to Q4 2017).

anticompetitive conduct.'") (citation omitted). The evidence of likely harm bolsters that presumption. Pl.'s Mem. at 25-36. [redacted] This merger will reduce that competition and is likely to lead to higher prices.[44]

IV. THE MERGER WOULD INCREASE TRONOX'S INCENTIVE AND ABILITY TO REDUCE OUTPUT

Defendants assert that they have only ever reduced output "as a matter of last resort" under the most dire financial circumstances and never with any intention of raising prices. Defs.' Br. at 17; *see* Defs.' TRO Br. at 13-14. But Defendants' history shows that they have reduced output in the past, that they understand that reducing output increases TiO2 prices, and that they can reduce output again—particularly after the merger—when they will have an even greater ability and incentive to do so. Plaintiff's economic expert, Dr. Nicholas Hill, thoroughly debunked Defendants' assertion that they only reduced output as a matter of financial necessity. [redacted][45] [redacted].[46]

Even in 2018, despite North American supply shortages,[47] [redacted]

[redacted]

[44] Pl.'s Mem. at 25-33; *see also* Trial Tr. 280:19-281:1 (Malichky, PPG) (testifying that Tronox executives said that Tronox would raise prices post-merger); [redacted]

[45] [redacted]

[46] [redacted]

[47] *See, e.g.*, [redacted] PX7033 at 191:19-192:9 (Post, AkzoNobel).

[redacted].[48] And that practice is likely to increase with the merger. Tronox's then-CEO assured investors that after the merger the company would "still balance our supply with demand," [redacted].[49] Moreover, running under capacity is not the financial burden that Defendants purport it to be. Defs.' Br. at 17. Not only have they done it with some regularity (as noted above), but as Tronox management explained to investors, operating at 80 percent capacity utilization is "not an uncomfortable position for us. Obviously we would like to be operating in the high 90s but we have reconfigured some of our activities and think we can do it profitably without a lot of fixed costs overhang associated with it."[50]

The price implications of these output reductions are clear. Defendants and other North American TiO2 producers consistently credit industry output reductions—either outright facility closures or temporary shutdowns—with contributing to higher chloride TiO2 prices. Pl.'s Mem. at 34-36. [redacted][51] [redacted][52]

Consistent with the clear evidence that output affects price, Dr. Hill employed two models commonly applied to commodity markets to confirm the qualitative evidence and the basic economic intuition of *Merger Guidelines* § 6.3, that larger firms, such as the merged firm here,

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[48] [redacted]

[49] PX9000 at 012 (Tronox Q4 2016 Earnings Call); [redacted].

[50] PX9033 at 012 (Tronox Q2 2012 Earnings Call).

[51] *See, e.g.*, [redacted]

[52] [redacted]

have a higher incentive to reduce output.[53] The Capacity Closure Model ("CCM") incorporates Defendants' actual cost data as well as likely rival responses, and finds that it would be profitable for the merged firm to reduce output.[54] The Cournot model, meanwhile, also predicts that the merger would lead to higher chloride TiO2 prices in North America.[55] That two different models, with distinct features, reach similar results confirms that this merger is likely to have anticompetitive effects.[56]

Defendants attack the CCM for not considering competitors' potential responses to the output reduction, Defs.' Br. at 15-16, but they ignore that Dr. Hill analyzed real-world data to estimate responses to chloride TiO2 price increases in North America, incorporated them into his model, and found them insufficient to render an output reduction by the merged firm unprofitable.[57] Dr. Hill did not "assume," for example, that redirected exports to North America would not defeat a price increase. [redacted][58] Further, the increases in chloride TiO2 imports that Defendants claim are necessary to defeat a price increase predicted by the CCM, Defs.' Br. at 16-17[redacted]

[53] Trial Tr. 1764:13-1769:20 (Hill).
[54] *Id.* at 1776:2-9, [redacted] Defendants claim that the CCM is wrong because it predicts that the premerger firms lacked an incentive to lower output, but both did so in 2015. Defs.' Br. at 17. Defendants overlook that the model assessed incentives based on the most current data available, not those at the times of the reductions. Defendants offered no analysis to the contrary.
[55] Trial Tr. 1781:3-24 (Hill); [redacted]
[56] Trial Tr. 1778:18-1779:3 (Hill); [redacted]
[57] Trial Tr. 1774:10-1776:1 (Hill).
[58] [redacted]

[redacted][59] This is hardly the "small" change Defendants imply. Finally, Defendants claim that the CCM fails to predict Chemours's behavior, Defs.' Br. at 16, but they overlook [redacted][60] [redacted]

Defendants' criticisms of the Cournot model are equally unavailing. Cournot is the standard model for assessing competitive effects in commodity markets.[62] [redacted][63] And although Defendants argue that Cournot suggests the merger may be unprofitable, Defs.' TRO Br. at 15, that is only because they mistakenly focus on variable profits, not total profits.[64] Finally, Defendants argue that Cournot is invalid because it implies that large chloride TiO2 suppliers have unrealistically low costs. Defs.' TRO Br. at 15-16. [redacted][65]

V. CHINESE TIO2 PRODUCERS ARE NOT RAPID ENTRANTS

Once again describing a market that no North American customer would recognize, Defendants argue that Chinese TiO2 producers should be deemed "rapid entrants" to the North American chloride market. Defs.' Br. at 30. To be considered rapid entrants, though, those Chinese firms must be capable of "easily and rapidly" selling enough chloride TiO2 to customers

59 [redacted]
60 [redacted]
61 [redacted]
62 [redacted]
63 [redacted]
64 Trial Tr. 1781:25-1782:19 (Hill); P[redacted]
65 [redacted]

in North America to prevent a price increase. *Merger Guidelines* § 5.1. But very few Chinese TiO2 producers even produce chloride TiO2.[66] And those that do would need to have their products qualified by customers before those customers would buy it—a process that can take years.[67]

Moreover, Defendants cite no evidence that any Chinese firms currently have uncommitted production capacity that they could use to supply significant volumes of chloride TiO2 to North America. And that notion appears unlikely, given Chinese firms' struggles with chloride TiO2 production technology, as well as booming demand for TiO2 in China and Asia.[68] While Defendants single out Lomon Billions's potential chloride TiO2 expansion plans, Defs.' Br. at 31, those plans remain years away from completion,[69] and Tronox recently told investors that it did not expect that expansion to have any impact on pricing.[70]

Defendants also point to the recent growth of Chinese *sulfate* TiO2 imports to North America. [redacted][71] Finally, Defendants argue that Chinese TiO2 compensated for supply shortfalls in Europe following the fire at Venator's Pori,

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[66] [redacted]

[67] *See, e.g.*, Trial Tr. 652:9-654:6 (Young, Sherwin-Williams); [redacted]

[68] Pl.'s Mem. at 37-39; Trial Tr. 1879:4-22 (Hill).

[69] PX9101 at 008 (Tronox Q4 2017 Earnings Call) (describing Lomon Billions's planned timeframe for the first phase of their expansion as a "bit aggressive") [redacted]

[70] Trial Tr. 2410:12-2411:11 (Tronox, Quinn) (Lomon's possible expansion would "would sort of balance the incremental, you know, global growth."); PX9101 at 008 (Tronox Q4 2017 Earnings Call) ("So we don't see that, that incremental expansion will significantly change the current dynamics."); Trial Tr. 1881:2-22 (Hill); RX1197 at 046 (Feb. 2018 TZMI Report) ("[t]he capacity changes from 2019-2022 are expected to net far less supply than is required to meet the additional demand.").

[71] [redacted]

Finland sulfate TiO2 plant. Defs.' Br. at 31. [redacted][72] None of that suggests that Chinese suppliers are in any position to "rapidly" enter the North American market for chloride TiO2 or discipline a North American price increase resulting from the merger.[73]

VI. DEFENDANTS' ALLEGED EFFICIENCIES ARE NOT COGNIZABLE

Defendants do not dispute that they must prove "merger-specificity and verifiability" for all their claimed efficiencies. *United States v. Anthem*, 855 F.3d 345, 355-56 (D.C. Cir. 2017). Yet they have not even tried to meet that standard. In fact, for several assertions, Defendants have failed to cite any evidence at all.[74] That is insufficient. As the D.C. Circuit made clear, "the court must undertake a rigorous analysis of the kinds of efficiencies being urged by the parties in order to ensure that those 'efficiencies' represent more than mere speculation and promises about post-merger behavior." *Heinz*, 246 F.3d at 721.

A. Defendants' Focus on Vertical Integration is Misguided

Rather than arguing the legally significant issues of merger-specificity and verifiability, Defendants provide generalized arguments related to vertical integration.[75] Defs.' Br. at 24-26; Defs.' TRO Br. at 17-18. Several of Defendants' claimed efficiencies are based upon the notion that increased vertical integration will lead to greater TiO2 output. But Tronox—which is already

[72] [redacted]

[73] *See* [redacted]

[74] There are no citations for the following: the first four sentences of page 25 related to the functionality of Tronox and Cristal's TiO2 plants; the assertion that vertical integration ensures feedstock supply, creates incentives or eliminates volatility; or the assertion that Tronox is the only entity that "can and will fix the Jazan slagger." Defs.' Br. at 25-27.

[75] Defendants also assert that the transaction is needed to meet the demands of their customers. Defs.' Br. at 25. But Defendants provide no evidence of this. In fact, no customer at the administrative trial testified in support of the merger.

vertically integrated—[redacted][76] Moreover, the advantages claimed by Defendants as associated with vertical integration are not merger-specific. Tronox acknowledges that it has options absent the merger to take advantage of vertical integration and expand output.[77]

B. Defendants Rely on "Judgment" Rather Than Verifiable Facts

In support of their claimed efficiencies, Defendants rely almost exclusively on testimony from their own executives as to the efficiencies they expect to achieve. Defs.' Br. at 26-29. Defendants' reliance on "its managers[']experiential judgment" is inadequate under the law because it cannot be independently verified. *United States v. H&R Block*, 833 F. Supp. 2d 36, 91 (D.D.C. 2011) ("While reliance on the estimation and judgment of experienced executives about costs may be perfectly sensible as a business matter, the lack of a verifiable method of factual analysis resulting in the cost estimates renders them not cognizable by the Court.").[78] As Plaintiff's expert Dr. Zmijewski explained, [redacted] In fact, Defendants' arguments are contradicted by the testimony of their executives. [redacted][80] [redacted]

[76] [redacted]

[77] PX9014 at 008 (Tronox Q2 2013 Earnings Call) (publicly stating that Tronox could expand TiO2 output by putting in additional lines at its TiO2 plants). For example, a Tronox executive testified that it could simply sell its excess feedstock to Cristal without needing to merge. Trial Tr. 2681:17-2682:24 (Turgeon, Tronox).

[78] If business judgment were sufficient, "the efficiencies defense might well swallow the whole of Section 7 of the Clayton Act because management would be able to present large efficiencies based on its own judgment and the Court would be hard pressed to find otherwise." *H&R Block*, 833 F. Supp. 2d at 91.

[79] [redacted] Dr. Zmijewski is the only expert to offer a report analyzing the claimed efficiencies under the *Merger Guidelines*.

[80] [redacted]

[redacted][81]

In addition, Defendants fail to address several of Plaintiff's arguments: the uncertainty that Tronox will ultimately purchase Jazan; [redacted]; Tronox insulating itself from risk on fixing Jazan; [redacted]; and Tronox's projections for Yanbu are managerial estimates. Pl.'s Mem. at 41-42. Defendants also have failed to provide evidence that their cost savings "will accrue to the benefit of the consumers." *CCC Holdings*, 605 F. Supp. 2d at 74.

C. Defendants' Reliance on KMPG is Inadequate Under the Law

Defendants seek to rely upon a due diligence analysis from KPMG, a consulting firm hired during the deal-making, as an independent source of "validation" of its efficiencies.[82] [redacted]

This is not the independent analysis required to verify claimed efficiencies. *See H&R Block*, 833 F. Supp. 2d at 89. Nor is it an analysis of merger-specificity and cognizability under the *Merger Guidelines*.[85] *See Sysco*, 113 F. Supp. 3d at 83 (finding that third party's due diligence analysis was not sufficient under antitrust efficiencies standard).

VII. PLAINTIFF'S LIKELIHOOD OF SUCCESS IS BASED ON THE EVIDENCE

Defendants argue that the Court should base its assessment of Plaintiff's likelihood of

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[81] [redacted]

[82] Defendants state that the synergies were "validated" by KPMG – a term that has no legal significance in efficiencies analysis. *See* Defs.' Br. at 29.

[83] [redacted]

[85] [redacted]

success on the merits on a handful of the ALJ's questions and comments at the administrative trial. But the likelihood of success is to be based on the merits of Plaintiff's *evidence*. *See Heinz*, 246 F.3d at 715. Judges often ask questions of counsel and witnesses that do not reveal how they will ultimately decide the issues. Here, for example, the ALJ asked questions of both sides.[86]

VIII. THE EQUITIES STRONGLY FAVOR A PRELIMINARY INJUNCTION

Once the FTC has established a likelihood of success on the merits, that showing "weighs heavily in favor of a preliminary injunction," *FTC v. PPG Indus.*, 798 F.2d 1500, 1508 (D.C. Cir. 1986) (citation omitted), and "a counter showing of private equities alone [does] not suffice to justify denial of a preliminary injunction barring the merger." *Staples*, 190 F. Supp. 3d at 137 (quoting *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1050 (D.C. Cir. 2008)). Defendants here offer only claimed private equities, and misguided and baseless assertions based on a misunderstanding of the statutory scheme.

First, Defendants contend that the FTC has pursued an "unjustified and unprecedented tactic of delay" by proceeding through administrative litigation.[87] Defs.' Br. at 3. But assessing mergers through the Commission's administrative system is the process established by Congress. 15 U.S.C. § 45(b); *see also Heinz*, 246 F.3d at 726-27 (Congress authorized the FTC to seek federal preliminary injunctions merely to "preserve [the] status quo" pending the administrative proceeding (citation omitted)). Defendants' disgruntlement at having to litigate this case through a Congressionally-mandated administrative proceeding is irrelevant.

Rather, the relevant inquiry under Section 13(b) is whether *public* equities favor a

[86] *See, e.g.,* [redacted]

[87] Defendants elaborate on this and other claimed equity arguments in the proffer of Tronox's CEO filed on July 25, 2018. Declaration of Jeffry Quinn, July 25, 2018, ECF No. 76-1. As referenced at yesterday's hearing, Plaintiff objects to much of the content of that proffer, and will be filing a brief next week outlining those objections and providing a further response to Defendants' baseless arguments.

preliminary injunction. 15 U.S.C. § 53(b). Those public equities "include (i) the public interest in effectively enforcing antitrust laws and (ii) the public interest in ensuring that the FTC has the ability to order effective relief if it succeeds at the merits trial." *Sysco*, 113 F. Supp. 3d at 86; *see also Staples*, 190 F. Supp. 3d at 137. Neither factor questions whether the FTC should proceed in administrative court. Instead, these factors—and Section 13(b) itself—*presume* that the FTC does just that. Following the process established by Congress cannot violate the public interest.

Defendants complain that Plaintiff did not file for a preliminary injunction at the same time it filed the administrative complaint. But the only function of the federal court proceeding is to prevent the transaction from closing while the merits are adjudicated before the FTC. *See, e.g.*, *Sysco*, 113 F. Supp. 3d at 21-22 (preliminary injunction prevents the merger pending "adjudication of the merger's legality" in the administrative proceeding). Here, the transaction could not close because of the ongoing European regulatory proceeding. There was no reason to seek a preliminary injunction. As a result, Plaintiff did what it has done in similar situations in the past—proceeded administratively without seeking a federal preliminary injunction.[88]

Defendants fundamentally misconstrue the applicable legal framework. The FTC's pursuit of administrative litigation is not a dilatory "tactic," and a preliminary injunction action does not resolve "any legal questions" about the transaction. *See* Defs.' Br. at 39-40. Rather, the legality

[88] When there was no imminent threat that a merger could close, and thus no need for preliminary relief in federal court, the FTC has often pursued only administrative litigation. *See, e.g.*, *In re Cabell Huntington Hosp., Inc.*, No. 9366, Compl. (FTC Nov. 15, 2015); *In re Pinnacle Entm't, Inc.*, No. 9355, Compl. (FTC May 28, 2013); *In re Omnicare, Inc.*, No. 9352, Compl. (FTC Jan. 27, 2012). Notably, in each of these cases, subsequent events rendered further proceedings unnecessary. That possibility was present here—the European Commission ("EC") could have blocked this transaction. That, of course, is another reason why launching an emergency federal preliminary injunction proceeding to temporarily block a transaction that may never be able to proceed is not in the public interest. Defendants' reference to *Staples* is not on point. Among other things, in that matter, the EC proceedings were expected to terminate on short notice, as the merging parties had agreed to divest the entire competitive overlap in Europe.

of this transaction must be litigated before the ALJ and Commission. *Heinz*, 246 F.3d at 713. Indeed, while Defendants selectively quote certain FTC Commissioners, *see* Defs.' Br. at 33-34, they notably omit that the current Commission unanimously made this very point in rejecting Defendants' motion to stay the administrative proceedings:

> Respondents ask the Commission to reassess whether to file for a preliminary injunction in federal court. Respondents argue that this would be a "faster and more efficient means to resolve this matter." Motion at 5. Respondents misunderstand the role of a preliminary injunction in the context of the Commission's Part 3 adjudicative process. The Commission may seek a preliminary injunction to preserve the status quo, i.e., to prevent consummation of the proposed transaction, until the administrative proceeding on the merits takes place. *See, e.g.*, *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 726-27 (D.C. Cir. 2001). At present, there is no need for a preliminary injunction action to preserve the status quo.[89]

Furthermore, far from being dilatory, the result of the FTC's approach here is that Defendants have already received a full trial on the merits. Given that this transaction could not (and still cannot) close, the FTC could have waited to file an administrative complaint until now, and thus Defendants' "day in court" might still be awaiting its commencement. But instead, Defendants had the benefit of a full trial on the merits in the forum Congress intended.

Finally, Defendants' inability to close their transaction has nothing to do with the FTC's administrative proceeding. Instead, it is entirely the result of Defendants' failure to conclude their proceedings before the European Commission. And in any event, Defendants have not proceeded in the U.S. litigation with anything resembling alacrity. Until post-trial filings, Defendants never sought to expedite the administrative proceedings, even though that is authorized in the FTC's rules.[90] Instead, Tronox wasted weeks litigating an improper collateral litigation against the FTC in Mississippi, a case which it ultimately dropped. And then Defendants even sought to stay the case. Defendants can hardly complain about the duration of a

[89] PX9128 at 002 (*In re Tronox Ltd.*, No. 9377, Order Denying Respondents' Motion to Stay and Temporarily Withdraw This Matter From Adjudication, FTC May 16, 2018).
[90] *See* 16 C.F.R. § 3.1.

proceeding that they have approached with so little urgency.

Second, in their brief, and more elaborately in the proffer by Tronox's CEO, Defendants contend that the equities weigh against an injunction because of asserted costs associated with having to extend their deal agreement, and asserted costs and uncertainties associated with the transaction not closing. Defs.' Br. at 38-39. But Defendants' extension of their agreement is not unusual; to the contrary, merging parties routinely extend such deadlines following both FTC and Department of Justice merger challenges, to enable the litigation to conclude.[91] Moreover, Defendants' concerns relating to delays in closing are private equities, which do not outweigh effective enforcement of the antitrust laws.[92] *See Heinz*, 246 F.3d at 726; *Whole Foods*, 548 F.3d at 1041; *FTC v. Penn State Hershey Med. Ctr.*, 838 F.3d 327, 353 (3d Cir. 2016).

Third, Defendants' assertion that the FTC can "easily" obtain a divestiture that "entirely resolve[s]" the competitive concerns lacks legal and factual merit. Defs.' Br. at 40-41. The D.C. Circuit and Supreme Court have made clear that post-merger remedies are an "inadequate and unsatisfactory" substitute for a preliminary injunction. *Heinz*, 246 F.3d at 726 (citing *FTC v. Dean Foods Co.*, 384 U.S. 597, 606 n.5 (1966) ("Administrative experience shows that the Commission's inability to unscramble merged assets frequently prevents entry of an effective

[91] Recent D.D.C. cases in which merging parties have extended deadlines following FTC or Department of Justice merger challenges include *United States v. Aetna*, No. 16-1494, *United States v. Anthem*, No. 16-1493, *FTC v. Staples*, No. 15-2115, and *FTC v. Sysco*, No. 15-256.

[92] Defendants' suggestion that the equities weigh against an injunction because of purported "pro-competitive" benefits of the transaction is also unavailing. Defs. Br. at 34. First, the equities inquiry asks whether the *injunction*—not the merger—is in the public interest, and all of Defendants' purported deal benefits will still be available if this Court grants a preliminary injunction and the FTC subsequently determines that the deal is lawful. *Penn State Hershey*, 838 F.3d at 353. Second, Tronox has conceded that the purported deal efficiencies have little or no connection to North America. PX9101 at 007 (Tronox Q4 2017 Earnings Call); Trial Tr. at 2407:20-25 (Quinn, Tronox) ("I would agree with you that the overwhelming majority of those synergies are related to . . . non-U.S. assets.").

order of divestiture.")). And subsequent FTC experience has only underscored the point.[93] *See Penn State Hershey*, 838 F.3d at 353 n. 11 (reversing the denial of a preliminary injunction and noting that "courts have repeatedly recognized that it is difficult to [order a divestiture post-consummation]").

As the lack of citations in their brief underscores, Defendants' sweeping assertion that a contemplated divestiture of the Cristal plant in Ashtabula, Ohio, would be "easy" to accomplish lacks any basis in the record. There has been no discovery or testimony on this purported remedy. As such, there are a host of questions concerning whether such a remedy would resolve concerns, including whether the proposed buyer would raise competitive concerns. Moreover, the evidence in the record refutes Defendants' suggestion that such a divestiture would be easy to execute. [redacted][94] Moreover, Tronox plans to integrate these functions into its own operations,[95] which is the very scrambling of the eggs that warrants broad access to preliminary relief. *See, e.g., Whole Foods*, 548 F.3d at 1034; *Sysco*, 113 F. Supp. at 87. Finally, even if the FTC could ultimately obtain a divestiture after the merger closed, there would be significant harm to competition and customers for the duration of proceedings until that remedy is achieved.

[93] For example, in one post-consummation matter, the Commission found a merger unlawful but could not effectuate an adequate divestiture remedy because the parties were too integrated. *In re Evanston Nw. Healthcare Corp.*, No. 9315, 2007 WL 2286195, at *76-79 (F.T.C. Aug. 6, 2007). In another, *ProMedica Health Sys., Inc. v. FTC*, which the Commission successfully litigated through an appeal, *see* 749 F.3d 559 (6th Cir. 2014), it took the Commission seven years from commencement of the action to effectuate a divestiture.

[94] [redacted]

[95] Trial Tr. 2772:23-2774:3 (Mancini, Tronox); [redacted]

For the reasons described above, Plaintiff respectfully requests that the Court grant a preliminary injunction pursuant to Section 13(b) of the FTC Act.

Dated: July 31, 2018

By: /s/ Dominic Vote

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