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May 16, 2012

**VIA HAND DELIVERY**

Headquarters Hearing Clerk (1900L)  
United States Environmental Protection Agency  
Office of Administrative Law Judges  
1200 Pennsylvania Avenue NW  
Washington, DC 20450

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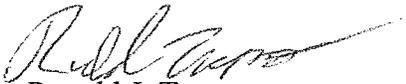
Re: In the Matter of Elementis Chromium, LP  
Docket No. TSCA-HQ-2010-5022

Dear Ms. Anderson:

This firm represents Elementis Chromium Inc. (formerly Elementis Chromium, LP) in the above matter. Enclosed please find an original and two (2) copies of the *Reply Brief of Respondent, Elementis Chromium Inc.* Please file the original of this document and return one time-stamped copy in the enclosed self-addressed stamped envelope.

Please call me if you have any questions. Thank you for your attention to this matter.

Very truly yours,

  
Ronald J. Tenpas

Enclosure

cc: Hon. Susan L. Biro, Chief Administrative Law Judge, USEPA (via Hand Delivery)  
Mark A.R. Chalfant, Esq., USEPA (via email and FedEx)  
Erin K. Saylor, Esq., USEPA (via email and FedEx)

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY

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IN THE MATTER OF: )  
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 )  
Elementis Chromium Inc. )  
f/k/a Elementis Chromium, L.P., )  
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 )  
Respondent. )  
\_\_\_\_\_

Docket No. TSCA-HQ-2010-502

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REPLY BRIEF OF  
RESPONDENT, ELEMENTIS CHROMIUM INC.

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## I. INTRODUCTION

Much has been written about this enforcement action. However, whether Respondent, Elementis Chromium Inc. (“Respondent” or “Elementis”) violated Section 8(e) of TSCA by not informing EPA of the substantial risk information in the Final Four Plant Report depends on three straight-forward, but critical, questions:

1. What substantial risk information was *reported by* the Final Four Plant Report and thus obtained by Respondent?
2. Was that substantial risk information already known to EPA?
3. Did Respondent know that EPA was aware of the substantial risk information?

The answer to the first question is essential because Section 8(e) of TSCA requires only that Respondent inform EPA of substantial risk information it obtains about a chemical. TSCA 8(e) does not require a manufacturer to speculate, interpolate or otherwise guess as to what an EPA scientist or outside reviewer may do with a report to further extrapolate risk from it, or based on the fact that such individuals may think the information useful or interesting. Thus, once the substantial risk information Respondent obtained is correctly identified, Respondent must prevail in this matter, having further demonstrated, by a preponderance of the evidence, that the second and third questions must be answered in the affirmative.<sup>1</sup>

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<sup>1</sup> EPA provides a detailed explanation of the preponderance standard in its Reply Brief. Respondent has never disputed its burden, although, of course, the mere fact that EPA contends there is competing evidence to that which the Respondent put forward does not mean that Respondent has failed its burden. Respondent’s evidence can certainly be the more persuasive, and thus satisfy the preponderance standard, even if EPA disputes a point. In any event, in its Post-Hearing Brief, Respondent assumed that both the Complainant and the Presiding Officer would understand and accept that when Respondent makes statements such as the evidence “shows,” “demonstrates” or “establishes” a fact, that Respondent meant that a preponderance of the evidence “shows,” “demonstrates” or “establishes” such fact, without each time having to restate the preponderance test. So, too, in this brief. For the sake of brevity, Respondent will

The record in this matter establishes that the only information reported in the Final Four Plant Report (and thus obtained by Respondent) of a substantial risk associated with hexavalent chromium was the Report's finding that workers exposed to certain cumulative hexavalent exposure levels -- the highest levels of cumulative hexavalent chromium in the cohort -- showed a statistically increased risk of lung cancer. The evidence further demonstrates that the Gibb Study, a study EPA funded and conducted by a high-level, award-winning EPA epidemiologist, identified the exact same lung cancer risk, but at much lower cumulative exposures than identified in the Final Four Plant Report. This evidence clearly established that EPA was aware of this risk associated with these cumulative exposures to hexavalent chromium. The evidence further shows that EPA was in possession of the Gibb Study (and consequently, the substantial risk information) long before Respondent received the Final Four Plant Report. Finally, uncontroverted evidence showed that Respondent had actual knowledge that EPA was in possession of the Gibb Study. (Indeed, EPA does not appear to contest either that it was in possession of the Gibb study or that the Respondent was aware that EPA was in possession of the Gibb Study.) Therefore, Respondent must prevail in this matter.

Notwithstanding the foregoing, EPA argues that the Final Four Plant Report contains "new information" because it reported an increased risk of lung cancer at plants where exposures were "long-term, low-intensity." Comp't Reply Brief at 3. But EPA's argument fails for two reasons. First, the record in this matter is completely devoid of evidence that the Final Four Plant Report assessed either the duration of exposures or the

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forego further reference to the preponderance standard, given that it is presumably now common ground between both Parties and the Presiding Officer.

intensity of the exposures in the cohort, much less that the Final Four Plant Report then sought to associate risk with either or both metrics (exposure “duration” or exposure “intensity”). Instead, the evidence establishes that the Final Four Plant Report only correlated risk of lung cancer with cumulative exposures of the cohort members. While cumulative exposure is a metric that is based on both duration and intensity of exposure, the record is clear that the Final Four Plant Report did not correlate such measures with risk of lung cancer. Thus, EPA’s position contravenes the statute – it depends, *at best*, not on the information of substantial risk contained in the Final Four Plant Report, but risk information it believes can be derived through further manipulation and analysis of raw information provided in the Report, especially manipulations that produce “average” exposure levels for the whole cohorts in both the Final Four Plant Report and the Gibb Study. Ultimately, EPA’s argument must fail because, in order to conclude that exposures in the Final Four Plant Report were long-term, low-intensity, EPA improperly ventures beyond the findings of the Final Four Plant Report. EPA has not cited to any legal authority that TSCA Section 8(e) requires a manufacturer, processor or distributor of a chemical substance to conduct further, independent analysis of information it receives.

Second, even assuming, *arguendo*, that such authority exists, the evidence in this matter demonstrates that EPA’s further analysis of the data in the Final Four Plant Report was fatally flawed for multiple reasons. Among other things, as Elementis’ experts testified, using overall gross data to compute “average exposures,” to come up with the low-intensity/long-term v. high-intensity/short-term dichotomy, rather than to use the more detailed and direct exposure matrices to correlate risk, is an abuse, not a use,

of each report's data. Indeed, EPA's own experts confirmed this, acknowledging that cumulative exposure, by whatever means that cumulative exposure emerges, is the preferred metric by which to assess exposure risk. Similarly, if one looks at the actual data in the Final Four Plant Report, focusing on the actual exposure levels for those individuals who, in fact, died from lung cancer, it is apparent that they had widely varying exposure profiles, both in exposure duration and cumulative exposure. Thus, the Final Four Plant Report's own information refutes EPA's simplistic assertion that the Final Four Plant Report establishes risk with "low-intensity, long-term exposure." To the contrary, the record is entirely silent on what risks the Final Four Plant Report authors would have found had they focused only on "low-intensity, long-term exposures" – whatever that term might mean, given that it is completely without definition scientifically.

As to this point it bears noting that, in its Reply Brief, EPA trots out yet another theory – that the Final Four Plant Report was new risk information because it shows something about "trend." *See e.g.*, Comp't Reply Brief at 7. But that argument cannot pass the straight-face test – the experts routinely acknowledged, including again, EPA's own expert, that in terms of "trend" it was long-known that higher cumulative exposures were associated with greater risk. Thus, again, the Final Four Plant Report represented, in the words of EPA's own expert, "nothing new" in terms of any trend it did reveal.

Focusing on these fundamental points, rather than on diversions such as whether the parties have sufficiently discussed and elaborated on the "preponderance standard" in their briefs, it is clear that Elementis must prevail.

## II. ARGUMENT

### A. Respondent Has Established An Affirmative Defense To The Alleged TSCA

Section 8(e) of TSCA requires a manufacturer, processor or distributor of a chemical substance or mixture to inform EPA when it obtains any “information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment.” 15 U.S.C. § 2607(e). However, this section also expressly provides that a manufacturer, processor or distributor of a chemical substance or mixture does not have to inform EPA of such information if it “has actual knowledge that the Administrator has been adequately informed of such information.”

#### Id.

In this matter, the information obtained by Respondent in the Final Four Plant Report reasonably supporting the conclusion that hexavalent chromium presents a substantial risk of injury to health or the environment was already known by the Administrator and Respondent had actual knowledge that the Administrator was aware of such information. The evidence presented in this matter clearly demonstrates that Respondent has carried the burden of proving each element of this affirmative defense, and thus has established an affirmative defense to EPA’s allegation that it violated Section 8(e) of TSCA.

1. The Only Substantial Risk Information the Respondent Obtained Was the Final Four Plant Report’s Finding That Certain High Cumulative Exposures to Hexavalent Chromium Leads to an Increased Lung Cancer Risk

The first, and critically fundamental, question that must be answered to determine whether Respondent has established its affirmative defense is: what was the substantial risk information *reported by* the Final Four Plant Report and therefore obtained by

Respondent? This question can only be answered by looking at the content of the Final Four Plant Report within its four corners, not through further Agency manipulation, analysis and expert opining. In short, the question is not what would further Agency analysis of the data show, or what would a medical doctor find interesting about the data in the report, or what would an epidemiologist at the University of Massachusetts find after further data analysis. Rather, the correct inquiry is, what did the report itself tell Respondent about substantial risk?

As explained in the Final Four Plant Report itself and at the hearing by its author, Dr. Mundt, the Final Four Plant Report reported that there was a statistically increased risk of lung cancer seen in the highest quartile of cumulative exposures within the studied cohort. *See generally*, Initial Post-Hearing Brief of Resp't at 13-19; Tr. at 736-742. There is no evidence that the Final Four Plant Report provided any other substantial risk information associated with hexavalent chromium.

What is just as important as what the Final Four Plant Report said, is what it did not say. Contrary to EPA's claim, it did not report that substantial risk was associated with long-term exposure. In fact, Figure 24 in the Final Four Plant Report demonstrates that the exposures of the 25 cases of lung cancer had substantial variation in exposure duration. CX 1 at 147. Nor did the Final Four Plant Report state that substantial risk was associated with low-intensity exposure. Intensity is measured by concentration of hexavalent chromium in the air to which the workers are exposed. Dr. Mundt's testimony at hearing leaves no question that there is no risk finding in the Final Four Plant Report related to intensity:

Q. Did you do anything in your report to analyze the risk of lung cancer associated with average air concentrations of hexavalent chromium?

A. No, sir.

Tr. at 905 (Mundt).

Notwithstanding this clear record, EPA's position is that "the record shows that the Final Four Plant Report contains new information about the risk of lung cancer mortality from hexavalent chromium under long-term, low-intensity exposure conditions." Comp't Reply Brief at 3. While EPA makes vague reference to the "record," upon close scrutiny, the only thing in the record upon which EPA is relying is the testimony of its witnesses. See generally, Comp't Initial Post-Hearing Brief at 31-33. EPA does not, because it cannot, point to any place in the Final Four Plant Report where such risk information is reported. The Final Four Plant Report can be turned upside down, inside out and read forwards and backwards; nowhere will there be found a determination that substantial risk from hexavalent chromium was associated with long-term, low-intensity exposure.

Indeed, the EPA's Final Reply Brief is especially telling on this point. According to EPA, its position proceeds from the fact that "[d]espite the investigators' use of job exposure matrices to generate cumulative exposure estimates for individual employees" (emphasis added), EPA wishes now to re-characterize the Report based on "exposure conditions [that EPA and its experts] . . . obtained using average duration values" in the Report. Comp't Reply Brief at 12. Of course, much of the significance lies here in two small words – first, what EPA seeks to do here to establish liability is "despite" what the investigators actually did and, second, it relies not on information in the report but, rather on information it "obtained" – i.e. that it computed and now advances but which the original investigators never computed or reported. And thus, in these two small but heavily freighted words, EPA reveals what is truly at stake in this

action. It seeks to broaden TSCA's breadth beyond any limit in the statutory text, text which expressly limits a manufacturer's duties to risk information that the manufacturer obtains. On EPA's reading, Elementis now has a duty to report information that derives from calculations "despite" the fact that a report's investigator may never have chosen to conduct such an evaluation.

In turn, EPA's position is based on the principle that a manufacturer, processor or distributor of a chemical substance is obligated to provide EPA with information that can be derived, appropriately or inappropriately, from other information obtained by the manufacturer, processor or distributor. In doing so, it unmoors the process entirely from any process of peer review. We are left entirely to guess whether, had the investigators chosen to perform the alchemy that EPA now advances, peer reviewers would have regarded such manipulations and calculations as scientifically valid. In addition, in the context of an epidemiological study, such as the Final Four Plant Report, EPA's argument essentially demands that the Presiding Officer determine that a manufacturer, processor or distributor of a chemical substance can have no comfort that such a study need not be reported unless it first submits it to an EPA epidemiologist such as Dr. Cooper, and a medical doctor such as Dr. Speizer and another university-based epidemiologist such as Dr. Clapp, to get their analysis of the information (however flawed that analysis may be) to determine whether they believe further analysis, beyond that which the study itself reflects, reveals that the epidemiological study contains "new information" not actually reported.

The absurdity of EPA's position is clear on its face; there is no possible reading of TSCA 8(e) or EPA's guidance documents to support such an onerous and impossible

standard. Nor can EPA's position be excused through some notion that reporting is easy, therefore what is the harm of an overly expansive approach. Ultimately, Congress, in an effort to balance public benefits and reporting burdens, established a particular and clear standard by which the reporting obligation is measured. Thus, EPA's position becomes even more untenable when the further element of the affirmative defense provided in Section 8(e) is considered. Not only does EPA's position require analysis of the Final Four Plant Report beyond the Report's four corners (i.e. it requires an analysis that is "despite" what the Report authors did), it requires a manufacturer to also undertake the same analysis of all the information of which the Administrator is aware. As an example, one of EPA's experts, Dr. Cooper, opined that the Final Four Plant Report was different than the Gibb Study because the Final Four Plant Report detailed a study of long-term, low-intensity exposures (as discussed above, a finding completely absent from the Final Four Plant Report), and the Gibb Study was a study of short-term, high intensity exposures. Dr. Cooper did not cite a single reference to the Gibb Study itself indicating that the cohort was limited to short-term workers or to high-intensity exposure, and EPA does not and cannot cite to any page in the Gibb Study discussing such a finding. Indeed, again, EPA is performing an analysis that is "despite" what Gibb did – EPA is "obtaining" "exposure conditions."

Instead, Dr. Cooper's conclusion was based exclusively on two pieces of information: the mean duration of exposure for 2,357 cohort members, and data not contained in the Gibb Study, but rather, taken inappropriately from another study. Tr. at 174 and 215 (Cooper). Finally, even if some derivation were legally permissible, Dr. Cooper's conclusions were invalid. Dr. Cooper testified she determined that the Gibb

Study involved short-term workers because the mean duration of exposure of the cohort was 3.1 years. Tr. at 143 (Cooper). The absurdity of Dr. Cooper's conclusion that the Gibb Study looked at short-term exposure is patently clear when it is considered that the Gibb Study included 2,357 cohort members and their range of work at the plant was 1 day to 37.7 years. CX 62 at 1 and 6 (Table II). Dr. Cooper's incorrect and oversimplified analysis, attempting to reduce this wide variation to a single average of the exposure duration in the Gibb Study, underscores the danger in subjecting an epidemiologic study to analysis beyond the four corners of the report itself, including without peer reviewing the later analysis. Section 8(e) does not require a manufacturer to undertake such an analysis at the time it receives a report, nor does it allow EPA to undertake it later to pursue a TSCA 8(e) claim, nor should it. Such an approach can as readily lead to misinformation as it does to useful new information.

In this connection, it also bears noting that Dr. Cooper also utilized data that was not used or reported in the Gibb Study to conclude that the Gibb study worker exposures were "high-intensity." Specifically, Dr. Cooper took data from a study known as the Braver study (CX 20), claiming such data as representative of the Gibb Study cohort exposures. She utilized this dataset even though Dr. Gibb did not. Moreover, at the hearing, Dr. Gibb testified that the Braver data was *not* representative of exposures for the cohort he used, that he did not use such data, and that Dr. Cooper's use of this information to reach conclusions was "highly misleading." Tr. at 1047-1048 (Gibb). Thus, in both its Initial Post-Hearing Brief, and again here, Respondent has sufficiently pointed out the serious errors in Dr. Cooper's "analysis" on which she relied to opine that the cohort in the Final Four Plant Report was long-term, low-intensity, and the Gibb

Study was short-term, high intensity. The evidence contradicting her conclusions is overwhelming. And finally, even if it were somehow correct computationally, its relevance is nowhere apparent. EPA's own witnesses acknowledged that cumulative exposure, the exposure metric used in both the Final Four Plant Report and the Gibb Study, is the appropriate measure of exposure or dose in epidemiological studies assessing the occupational exposure to hexavalent chromium:

Q. And you indicated yesterday cumulative exposure is the best kind of measurement in this kind of situation. Correct?

A. I think it is for lung cancer, yes.

Tr. at 431 (Clapp).

Q. So I'd like to return in a few moments to that biological relevance issue you've raised but let me ask you a couple other things. Quantification of exposure, how do epidemiologists quantify exposure in an occupational epidemiology study?

A. Well, generally you use what you've got and if you've got a potential for measuring a cumulative exposure, that's probably one of the better measures.

Tr. at 524 (Speizer).

Thus, short-term/high-exposure, long-term/low-exposure is, in the end, "white noise" that only distracts from the real scientific finding – one that is rooted in cumulative exposures.

In an apparent alternative theory, EPA also seeks to argue that the Final Four Plant Report provided information related to "trend" in the overall cohort, Comp't Reply Brief at 8, relying especially on Dr. Cooper's testimony. While the precise meaning of this statement is difficult to discern, ultimately it fares no better as "information" allegedly contained in the Final Four Plant Report because the Final Four Plant Report did not contain any substantial risk information on "trends." The only "trend"

information contained in the record was Dr. Clapp's testimony about trends that he calculated using data in both the Gibb Study and the Final Four Plant Report. Tr. at 318 and 440 (Clapp). Respondent cannot be charged with having "obtained" information generated by Dr. Clapp almost 10 years after Respondent received the Final Four Plant Report. Again, the Complainant's failure to actually cite anything in the Final Four Plant Report related to trend is telling – instead they have only Dr. Cooper's and Dr. Clapp's re-characterization of the Final Four Plant Report.

The weakness of EPA's position substantively was also plainly revealed at the hearing and in the post-hearing briefing. The reason that the Final Four Plant Report revealed no "substantial information" related to the "trend" is because the data was reported by cohort quartiles and, for three of the quartiles, as Dr. Mundt testified, there was no statistically significant relation found between cumulative exposure and increased risk. Tr. 736 – 742 (Mundt). Thus, in the Final Four Plant Report, there was only one statistically significant level at which cumulative exposures were associated with increased risk – that was the highest quartile. Obviously a single point cannot reveal a "trend" – as trends are, by definition, revealed relationships between multiple data points. To now establish that there was "information" of "substantial risk," EPA apparently wants to rely on other data points for other quartiles, quartiles in which no statistically significant risk was revealed. In doing so, it not only seeks to rely on a "trend" risk that the Final Four Plant Report authors did not endorse, but it seeks to do so by relying on analytical relationships that fail to satisfy the most basic of scientific tests – the test of

statistical significance – a test that its own expert acknowledged was routine in the field.<sup>2</sup> Tr. at 454 and 457 (Clapp).

In sum, EPA's has failed to identify the relevant "information" in the Final Four Plant Report for multiple reasons. Fundamentally, those reasons boil down to EPA's effort to rely on "information" not actually in the Final Four Plant Report, doing so "despite" what the reports' authors chose to do; as well as importing data from other "reports" or manipulating or misrepresenting the significance of data actually in the Final Four Plant Report. But in doing so, it stretches TSCA Section 8(e) beyond its plain terms, given that Section 8(e) only requires that a manufacturer, processor or distributor inform EPA about substantial risk information that it "obtains." Section 8(e) does not require any further analysis; it does not require the manufacturer, processor or distributor to submit data to EPA for analysis by EPA; and it does not require the manufacturer, distributor or processor to consult with university epidemiologists to see what they think the data says. EPA has not pointed to any authority for its position, including its own guidance, as there is nothing in the law or its guidance that can support its position.

2. The Substantial Risk Information in The Final Four Plant Report Was Already Known by EPA

The record is clear that the only information reported in the Final Four Plant Report regarding a substantial risk from hexavalent chromium was that the workers in the highest quartile of cumulative exposure showed a statistically increased risk of lung cancer when compared to their reference populations. The next question that must be

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<sup>2</sup> In this connection, the Respondent notes that the Agency, for the first time, cites and relies upon a Reference Guide on Statistics to support its position. A Reply Brief that is post-hearing is far too late to seek to introduce new evidentiary materials and, thus, the Agency's effort should be disregarded or struck from the record.

answered is, was EPA aware of this substantial risk information? The evidence in this case clearly establishes that the answer is yes.

As Respondent detailed in its Initial Post-Hearing Brief, the record overwhelmingly demonstrates that the Gibb Study found a statistically significant increased risk of lung cancer in workers exposed to much lower cumulative exposures of hexavalent chromium than the cumulative exposures where a statistically significant risk of lung cancer was found in the Final Four Plant Study. EPA concedes this in its Reply Brief: “Respondent correctly states that the Gibb et al. study found increased risk at substantially significant, lower cumulative exposure levels than the Final Four Plant Report.” Comp’t Reply Brief at 7. EPA tries to blunt the effect of this concession by pointing out that Dr. Mundt testified that his use of quartiles was “arbitrary.” That is true but, as the testimony made clear, this is only true given a very specific meaning of “arbitrary.” First, Dr. Mundt testified that he felt compelled to look further at the cohort to determine if the risk seen in the overall cohort was randomly distributed across the different cumulative exposures. Tr. at 738 (Mundt). He testified that he did this by dividing up the cohort based on levels of cumulative exposure. *Id.* His very point was that looking at exposure risk based on gross overall averages would not have made the best use of the data he had (exactly the opposite of the approach EPA now adopts in this enforcement proceedings, which seeks precisely to rely on such gross averaging). Moreover, while Dr. Mundt could have used tertiles or quintiles, he nonetheless chose quartiles (and thus was “arbitrary”), because using quartiles increased precision, without losing definition. *Id.* Dr. Gibb, when he was a high-level, senior epidemiologist at EPA, also “arbitrarily” used quartiles in his award winning study, giving further credence to the

conclusion that Dr. Mundt reached a reasoned decision on how to approach his own analysis. Thus, Dr. Mundt was only “arbitrary” in the sense that he might, theoretically, have chosen another grouping method, not in the sense that his selection of quartiles was unreasoned or departed from sound analytical practice.

Moreover, and related even more directly to the legal dispute in this matter, regardless of the reasons Dr. Mundt chose for using quartiles, it is beyond dispute that, in fact, quartiles is how his findings were reported in the Final Four Plant Report. In turn, that is the information Respondent obtained – quartile information. EPA now cites to Dr. Cooper’s testimony at the hearing that “I think the focus on the individual [exposure] groups is simply misusing the data completely . . . . So that’s [an] inappropriate use of the sub segment of the data,” Comp’t Reply Brief at 7. With all due respect to Dr. Cooper, both Dr. Mundt and Dr. Gibb chose to focus on cumulative exposure quartile groups as the basis on which to assess and report “risk.” While Dr. Cooper is free to question whether this was the best choice, or a choice she herself would have made, it is irrelevant in this enforcement action. What matters is the actual information obtained by Respondent, i.e. the information as the Final Four Plant Report authors communicated it. Respondent did not receive, nor was it required to seek, Dr. Cooper’s critique of Dr. Mundt’s methodology (a curious critique given that it is supported by Dr. Gibb’s use of the same methodology while at EPA).

Similarly, while EPA further believes it is important that Dr. Cooper believes that “[t]he trend is mostly what’s in all of the data and that’s what we should be using . . . .,” and even assuming that such “trend” information is contained in the Final Four Plant Report (but see above, explaining it is not), even Dr. Clapp acknowledged that his

calculations using the data in the Final Four Plant Report confirmed the trend in the Gibb Study, a study already in EPA's possession at the time Respondent received the Final Four Plant Report. Tr. at 443 – 444 (Clapp). Similarly, Dr. Speizer, EPA's second expert, similarly acknowledged that in terms of trend, any trend that could be derived from the Final Four Plant Report, i.e. the fact that higher exposure produced higher risk, was nothing new. Tr. at 566 (Speizer).

3. Respondent Had Actual Knowledge that EPA Was Already Aware of the Substantial Risk Information Contained in the Final Four Plant Report

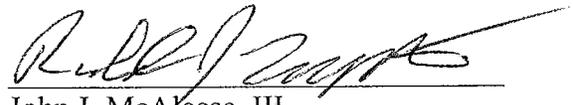
The final question that must be answered is did Respondent have actual knowledge that EPA was aware of the substantial risk information? Dr. Barnhart testified at the hearing that he knew about the Gibb Study and, that at the time he received the Final Four Plant Study, he had the Gibb Study on his desk. Tr. at 974 (Barnhart). He further testified that he knew that Dr. Gibb was employed by EPA at the time that he received the Final Four Plant Report, and thus that EPA was aware of the Gibb Study. Tr. at 985 – 986 (Barnhart). This testimony, which was not countered by any other evidence, clearly establishes that Respondent had actual knowledge that EPA was aware of the substantial risk information obtained by Respondent in the Final Four Plant Report.

**III. CONCLUSION**

There can be no finding that Elementis violated TSCA Section 8(e). A preponderance of the evidence clearly establishes that the substantial risk information reported by the Final Four Plant Report was previously known to EPA, and Elementis knew that EPA was already aware of this substantial risk information.

Respectfully submitted,

Date: May 16, 2012



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**CERTIFICATE OF SERVICE**

I, Ronald J. Tenpas, hereby certify that on May 16, 2012, I served a copy of *Reply Brief* of *Respondent Elementis Chromium Inc.* via e-mail and Federal Express on the following:

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