UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

In the Matter of

ECM BioFilms, Inc.,
a corporation, also d/b/a
Enviroplastics International,
Respondent.

Docket No. 9358

PUBLIC DOCUMENT

RESPONDENT ECM BIOFILM’S BRIEF IN REPLY TO COMPLAINT COUNSEL’S ANSWERING BRIEF

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RECORD REFERENCES & ABBREVIATIONS

• ALJID or ID – Initial Decision of the Administrative Law Judge
• ALJFF – The Administrative Law Judge’s Findings of Fact
• CCX – Complaint Counsel’s Exhibit
• RX – Respondent’s Exhibit
• JX – Joint Exhibit
• Tr. – Transcript of Testimony before the Administrative Law Judge
• Dep. – Transcript of Deposition
• CCPB—Complaint Counsel’s Pre-Trial Brief
• CCB – Complaint Counsel’s Post-Trial Brief
• CCRB – Complaint Counsel’s Post-Trial Reply Brief
• CCFF – Complaint Counsel’s Proposed Findings of Fact
• CCRRFF – Complaint Counsel’s Reply to Respondent’s Proposed Findings of Fact
• CCOB – Complaint Counsel’s Opening Brief
• CCAB – Complaint Counsel’s Answering Brief
• RPB – Respondent’s Pre-Trial Brief
• RB – Respondent’s Post-Trial Brief
• RRB – Respondent’s Reply to Complaint Counsel’s Post-Trial Brief
• RFF – Respondent’s Proposed Findings of Fact
• RPCL – Respondent’s Proposed Conclusions of Law
• RRCCFF – Respondent’s Reply to Complaint Counsel’s Proposed Findings of Fact
• ROB – Respondent’s Opening Brief
• RAB – Respondent’s Answering Brief
• “ECM Plastic” – A plastic manufactured through heat molding to contain ECM’s proprietary additive dispersed equally throughout, which additive causes plastics to biodegrade

• “Biodegradable Claim” - ECM’s express claim that ECM Plastic is biodegradable and/or that tests prove that ECM Plastic is biodegradable

• “Implied One Year Claim” – Complaint Counsel’s charge that ECM’s claim that ECM Plastics will biodegrade “in some time greater than a year” implies that ECM Plastics will completely biodegrade within one year after customary disposal.1

• “Rate Claim” - ECM’s express claim that ECM Plastic is biodegradable in 9 months to 5 years and/or that tests prove that ECM Plastic is biodegradable in 9 months to 5 years

• “One Year Rule” – Green Guide, 16 CFR § 260.8(c), statement that “[i]t is deceptive to make an unqualified degradable claim for items entering the solid waste stream if the items do not completely decompose within one year after customary disposal.”

• “End-Use Consumer” – A member of the general public exposed to ECM claims in the marketplace

• “Plastic Company Purchaser” – Those companies to which ECM solicits business, sells its product, or sold its product

1 As the ALJ explains, Complaint Counsel never defined this implied claim, either as to the precise unit of time said to be implied or as to how the express language “some period greater than a year” reasonably connotes a period of less than a year. ALJFF ¶¶255, 257–58; ALJID at 167 at n. 18, 171, 178, 184, 220, 220 at n. 37 (explaining that “it is arguably absurd to suggest that reasonable consumers would infer that a claim that a product is ‘biodegradable in some period greater than one year,’ means that a product will completely biodegrade into elements found in nature, in a landfill, in less than one year”). As the ALJ found, Complaint Counsel never challenged the express claim as false or unsubstantiated. ALJID at 179.
I. SUMMARY

Through the reliable survey of Dr. Stewart and nine lines of germane record evidence, ROB Part III.A.2; infra Part II.A.4, ECM rebutted any presumption that its Rate Claim\(^2\) was likely to affect consumer behavior or purchasing decisions. Neither below nor in their Answering Brief have Complaint Counsel presented any evidence to the contrary. Indeed, no such evidence exists. Instead, Complaint Counsel ask the Commission to infer, based largely on speculative hearsay, that the Rate Claim was material. The record evidence confirms that decisions to purchase were predicated on the intrinsic biodegradability, cost, and shelf life of ECM Plastic and not on “rates” of biodegradation which, for any particular plastic, are impossible to determine.

Complaint Counsel further attempt to resuscitate Dr. Michel’s study but that attempt fails. Dr. Michel’s study did not prove ECM Plastic non-biodegradable; the test was inconclusive. Dr. Michel did not undertake any evaluation necessary to determine the reason why the ECM Plastic (and the control!) did not biodegrade beyond an initial period of biodegradation. ALJID at 254–55. He failed to investigate whether the inoculum remained viable, id., yet we know that the control and the test plastic ceased biodegrading at the same time, thus begging the question whether the biota in the inoculum had died prematurely. Sahu, Tr. 1929–30.

Complaint Counsel also fail to respond cogently to ECM’s public interest argument. Complaint Counsel produce no evidence revealing any harm from ECM’s use of the Rate Claim before it was discontinued in 2013. ALJFF ¶259; FTC v. Klesner, 280 U.S. 19, 27 (1929).

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\(^2\) ECM principals observed ECM Plastic biodegradation within the 9 months to 5 years time frame, including in log piles, composting in gardens, and in aerobic and anaerobic drum tests. Sullivan, Tr. 725–28; Sinclair, Tr. 755–56. Dr. Morton Litt, tenured professor of macromolecular biology at Case Western Reserve University, and Patrick Riley, the inventor of the additive, performed confirmatory evaluations. Sinclair, Tr. 746–49, 753–54.
Similarly, Complaint Counsel fail to rebut ECM’s *ultra vires* argument. If Complaint Counsel’s proposed order is adopted, it would effectively prevent every product that is disposed of in a landfill from being labeled “biodegradable.” Without the right to distinguish plastic products based on their intrinsic biodegradability, the plastics industry would shift to more rapidly degrading technologies that are more deleterious to the environment, more expensive (thus dissuading market use), and less functional. Therefore, through the proposed order, FTC would effectively reform national waste management policy. Indeed, it would dissuade companies from expending additional sums to catalyze biodegradation because no product, indeed not even an orange, a banana, a tree trunk, or paper can reliably break down into elements in a landfill within one year after customary disposal. Indeed, there is no scientific test capable of predicting the time within which any biodegradable product will break down into elements in nature. The effect of Complaint Counsel’s requested order would be a fundamental change in national waste management policy; yet the setting of national waste management policy is not the province of this agency, it is the exclusive province of the EPA. *See* 42 U.S.C. § 6901.

II. ARGUMENT

A. ECM’s Rate Claim Was Not Material

A claim is material if “likely to affect the consumer’s choice of or conduct regarding a product.” *CCAB at 1* (citing FTC Policy Statement on Deception, 103 F.T.C. 174, 182 (1982)). Proof of materiality is by a preponderance of the evidence and is an indispensable element of deception. *In the Matter of Novartis Corp.*, 127 F.T.C. 580, 686–87 (1999); *see also In the Matter of Telebrands Corp.*, 140 F.T.C. 278, 290 (2005).
While express claims are presumed material, a respondent can counter that presumption “with arguments pertaining to the content of the ad itself or with extrinsic evidence.” In the Matter of Thompson Med. Co., 104 F.T.C. 648 at n. 45 (1984); In the Matter of Pom Wonderful LLC, 2012 WL 2340406, at *235 (May 17, 2012) (“[t]his is not a high hurdle”) (quoting Novartis, 127 F.T.C. at 686). “Materiality turns upon whether those consumers who have drawn the claim from the advertisement and have been misled by it are also likely to have their conduct affected by the misrepresentation.” Novartis, 127 F.T.C. at 691 (emphasis added). Therefore, Complaint Counsel were obliged to prove by a preponderance of the evidence that the Rate Claim was likely to affect conduct or purchasing decisions, Telebrands, 140 F.T.C. at 290–91, which they failed to do (presenting no evidence on point, only conjecture).

Although Complaint Counsel failed to meet their burden, ECM affirmatively rebutted the presumption through Dr. David Stewart’s survey and eight additional lines of evidence. The results of Dr. Stewart’s survey “make it highly unlikely that [certain ECM claims, including the Rate Claim] would be material to end use consumers …” RX 856 at 26. Consumers do not believe in set rates, because nearly all consumers (98% of them) understand rates vary depending on the kind of product and environmental and climactic conditions present, none of which may be accurately predicted in advance or disposal. ALJFF ¶¶550–55. They interpret the term “biodegradable” to mean a slow process by which a product breaks down or decays, perceiving the time for that process to vary based on materials and environment. ALJFF ¶554.

“The burden remain[ed] on Complaint Counsel to prove materiality by a preponderance of the evidence” yet Complaint Counsel offered not a single fact witness (thus no competent sponsor to interpret the meaning of any document). POM Wonderful, 2012 WL 781828 at *519 (citing Novartis, 127 F.T.C. at 686–87). Without competent sponsors, there is no basis for
interpreting the meaning of the content of documents cited by Complaint Counsel; the content is not only taken out of context but is unreliable hearsay (it being impossible not only to discern intended meaning but also to discern the extent to which any passage quoted was relied upon as decisional or influential in making a purchase).

Complaint Counsel introduced no evidence that anyone changed his or her conduct or made a purchase based on the Rate Claim. See generally CCAB. Despite deposing 11 ECM customers or potential customers, ALJFF ¶¶4–83, Complaint Counsel never asked whether the Rate Claim affected conduct or a purchasing decision. Without being asked directly, several deponents nevertheless stated that the Rate Claim was unimportant to them. CCX 800 (Ringley, Dep. at 17–18, 32, 35); CCX 801 (Kizer, Dep. at 19–22, 30); CCX 809 (Sandry, Dep. at 13–15, 19, 28, 72–73, 75); CCX 810 (Blood, Dep. at 15, 18–19, 28, 197–99); CCX 812 (Gormly, Dep. at 14–15, 23, 46–50); CCX 817 (Bean, Dep. at 19, 27); CCX 822 (Samuels, Dep. at 12–13, 22, 27–28); CCX 802 (Leiti, Dep. at 47, 49–50); CCX 804 (Collins, Dep. at 15); CCX 803 (Santana, Dep. at 43, 45–46). All customers explained that they counted on the product’s intrinsic biodegradability, not specifying any specific rate as important to them. RRB at 136–40; RFF ¶¶ 321, 359, 431, 605–725.

Complaint Counsel now ask the Commission to infer that the Rate Claim was material simply because ECM made that claim; a minority of customers asked about it, and 13 customers reiterated the claim to downstream customers. CCOB 1–16. Were those facts sufficient to establish materiality in the presence of countervailing evidence, the materiality element would be a fiction, it being satisfied merely upon proof that a claim was made. The precedent requires more, however (there must be a showing that conduct changed or purchases were made predicated upon the claim). On this record, there is no substitute for a witness testifying that but
for the Rate Claim he or she would not have made a purchase, yet that testimony is nowhere in the record. ROB at 18–39.

Complaint Counsel misconstrued Dr. Stewart’s survey, as if they themselves were competent substitutes for expert witnesses, and falsely stated—without record support—that the “primary attribute” of the ECM additive is its ability to biodegrade plastics within 9 months to 5 years. On the record, the primary attribute was unquestionably intrinsic biodegradability. As ECM’s CEO testified, the Rate Claim was made to distinguish the ECM product from more rapidly degrading products, a position taken in light of the Green Guides. Even when made, the Rate Claim was qualified by ECM to its purchasing customers, with ECM referencing the fact that the actual rate of biodegradation was dependent on environmental factors, none of which could be predicted in advance. Sinclair, Tr. 768–70.

1. ECM Applied the Proper Evidentiary Standard

Complaint Counsel erect a straw man when they argue that ECM applied the wrong standard by requiring “proof of actual consumer injury” in the materiality analysis. CCAB at 2 (citing ROB at 21). ECM never argued that proof of consumer injury was requisite to materiality (injury is requisite to a public interest finding, see discussion infra). Rather, in its Opening Brief, ECM argued (and continues to argue) that Complaint Counsel presented no evidence that ECM’s Rate Claim affected or influenced purchasing decisions, thus failing to meet their burden of proof. ROB at 21.3 Indeed, the evidence of record reveals that it was the unqualified

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3 Complaint Counsel incorrectly contend that “ECM repeated[ly] argue[d] ‘proof of actual consumer injury is not required’ to prove materiality.” CCAB at 3 (citing ROB at 5, 17, 21, 25, 29, 31). The ROB does not contain the phrase “actual injury.” See ROB.
Biodegradable Claim that motivated sales, not the Rate Claim.\textsuperscript{4} Indeed, as of 2013, ECM permanently discontinued making the Rate Claim. ALJFF ¶259.

2. The Materiality of ECM’s Unqualified “Biodegradable” Claim Is Irrelevant to the Materiality of ECM’s “Rate Claim”

Complaint Counsel argue that if ECM’s Biodegradable Claim is material, then a priori the Rate Claim is material. CCAB at 3. The argument is a contrivance contradicted by the record and is a non-sequitur. Record evidence shows that consumers understand biodegradability to mean that a product breaks down in nature but do not understand the term to mean a complete break down on any set timetable. Rather, consumers appreciate that biodegradation rates vary depending on the product and the environmental conditions present, factors unknowable in advance. ALJFF ¶554; RB at Part III.F.3; RRB at Part III.D.1; ROB at Part III.A.2.b–f. As the ALJ found, the critical question for ECM’s Plastic Company Purchasers was not how quickly ECM Plastics biodegraded but whether they were intrinsically biodegradable. ALJID at 277; see also RRB at 136–40; RFF ¶¶321, 359, 431, 605–725; see ALJID at 189–213; RB at 49–54, 73–76; RRB at 23–50; RAB at 21–34.\textsuperscript{5} The generally accepted test for predicting biodegradability in a landfill, ASTM D5511, does not predict rate; indeed, every plastic product scientifically identified as biodegradable (including Complaint Counsel’s Expert McCarthy’s own patented product) has been deemed so without specification of any rate. ALJFF ¶¶659–65, 758, 768, 771–74, 852–53.

\textsuperscript{4} Procuring evidence of materiality would have been simple—if that evidence existed. Complaint Counsel could have asked customers it deposed about the influence of the rate claim, but they did not.

\textsuperscript{5} That conclusion is supported by common sense. ECM customers incorporate the additive into many types of products. ECM’s marketing literature frankly explained that biodegradation times vary based on the product. See, e.g., CCX 4; CCX 5; CCX 6; CCX 10; CCX 11; CCX 24 at 12–17. All but a very few ECM customers did not include the Rate Claim on finished plastic products. See, e.g. RX 00–RX 34.
Consumers do want to know if a product is intrinsically biodegradable. C.f. CCAB at 4. But consumers do not care about the precise rate of biodegradation because they understand that rate depends on the particular product and the environmental conditions present. ALJFF ¶550 (explaining that 98% of Americans understand that rate of biodegradation is variable). Without any scientifically certain time for biodegradation of any product, consumers have no contextual reference against which to presume any specific rate applicable. Rate is thus immaterial.

3. The ALJ Erred in Finding the Rate Claim Material

Complaint Counsel cited four lines of evidence that allegedly established materiality. CCAB at 4 (citing ALJID at 288–91). None establishes the Rate Claim to have affected conduct or purchasing decisions and, so, none is material under the governing standard.

a) ECM’s Rate Claim Existed in a Small Subset of Advertising

ECM’s technology flyer stressed that its “technology differs significantly … because it does not attempt to replace the currently popular plastic resin formulizations but instead enhances them by rendering them biodegradable.” CCX 6. Its technology is preferable to photodegradable products that have issues with shelf-life because of reactivity to light. Its additive is preferable to PLA-based plastics which will not biodegrade in landfills, are expensive to manufacture, and cannot meet physical specifications. Id. ECM plastics biodegrade in home composting systems, in commercial composting, in landfills, when contacted with soil, as litter; but not in warehouses, on store shelves, or in office and home. Id. ECM’s brochure focused on benefits such as the foregoing and competitive pricing, similar mechanical characteristics to traditional plastics, recyclablility, and other significant factors—all unrelated to biodegradation “rates.” CCX 7. ECM’s materials also explained that environmental factors affect biodegradation rates, see, e.g., CCX 4; CCX 5; CCX 6, which qualification was given to
customers before a product purchase was made (see Sinclair, Tr. 769; Sullivan, Tr. 711; RX 135).

ECM’s 2007 and 2008 “Reprint of a Letter to an Interested Party” further reveals that ECM’s customers purchased the additive specifically because of factors other than rate. CCX 10; CCX 11. In its 2007 Letter, ECM explained that “[p]lastic products manufactured with ECM MasterBatch Pellets will have the same life expectancy as the same plastic manufactured without our additives under all but the conditions mentioned above where they are placed in constant contact with other materials that are biodegrading (i.e. on or buried in the ground).”

ECM also “certif[ied] the full biodegradation” (without reference to rate) “of most all plastic products manufactured with at least a one percent load of our additives.” Id.

Focusing out of context on the Rate Claim, Complaint Counsel utterly ignore the uncontroverted fact that ECM customers were directly informed by ECM before making a purchase that the actual rate for any particular plastic depended on environmental factors, factors incapable of prediction in advance of disposal. Sinclair, Tr. 769; Sullivan, Tr. 711; RX 135. The idea that a set “rate” was important in the market is a fiction contrived by Complaint Counsel in an effort to justify its prosecution. ECM’s customers reference concern for recyclability, tensile strength, shelf-life, cost, and intrinsic biodegradability, but not for biodegradation rate. See, e.g.,

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6 CCX 10 is an incomplete copy of ECM’s 2007 Letter to an Interested Party. Compare CCX 10 (one page and ending in the middle of a sentence) with CCX 11 (two pages).
RX 126–RX 134. The absence of any direct testimonial evidence of “rate claim” materiality is therefore unsurprising yet very telling.

While the Rate Claim did appear in a proportionately small number of retail materials, the Rate Claim was not prominent (even there) and has not been shown to affect conduct or purchasing decisions. Likewise, Complaint Counsel’s argument, CCAB at 5–6, that ECM conveyed the Rate Claim in correspondence with prospective or actual customers is irrelevant absent a showing that the claim altered behavior or induced a purchase. See generally CCAB.

ECM did not consider the Rate Claim an important aspect of its marketing. Sinclair, Tr. 768–69 (explaining that “people do not buy [ECM additive] based on that type of claim”). The materiality analysis concerns only whether the claim was likely to affect customers’ conduct or purchasing decisions. Novartis, 127 F.T.C. at 691. The evidence proves not only that the Rate Claim was unlikely to affect customers’ conduct or purchasing decisions, but also that in fact it did not do so on the record before the Commission.

b) That ECM’s Customers Asked About the Rate Claim Is Not Evidence that the Claim Was Material

Complaint Counsel argue that ECM’s Rate Claim was material because some ECM customers asked about it, citing select e-mails wherein such questions were asked. CCAB at 8–10 at n. 7. A small subset of the universe of emails in this case, the email content cited, in the absence of sponsoring witnesses, constitutes unreliable hearsay. The few e-mails between ECM and its customers and/or potential customers were cherry picked from more than 100,000 pages of e-mail communications, and Complaint Counsel elicited no fact discovery (or testimony)

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7 Indeed, the end-use consumers exposed to the claim never made purchasing decisions. ALJID at 300–01 at nn. 59–60. No evidence suggests or proves that customers made a choice between plastics, e.g., those containing the rate claim and those without. Thus, no evidence supports materiality of the rate claim in the consumer marketplace.
concerning those files. RFF ¶30. Without requisite testimonial foundations, nothing beyond speculation exists to suggest that a customer was in fact influenced at all by the Rate Claim. See Lozano v. Ashcroft, 258 F.3d 1160, 1166 n. 6 (10th Cir. 2001) (reasoning that, because a document is hearsay, the court cannot know the basis for the content in the document). Indeed, fully 35 of the 37 emails cited by Complaint Counsel are from individuals in entities that never even purchased the ECM additive!8 CCX 235 (ECM customer list); CCAB at 8–10 at n. 7. Using Complaint Counsel’s illogic, ECM would argue that because 37 were exposed to the Rate Claim and 35 made no purchase, the 35 must have been dissuaded from buying the product in because of the Rate Claim (but that too would be a leap of faith, rank speculation), and so ECM does not go that far. Of the remaining 2, there is no record support for the conclusion that the Rate Claim caused a change in their position or resulted in an ultimate purchase.

Left without factual support under the materiality prong, Complaint Counsel manipulate isolated notations in ECM’s own logs, e.g., a note concerning “Westchem Group” (CCX 423) to suggest that the Rate Claim was material. The ECM log entries cited lack a testimonial foundation. The parties cannot know what “Westchem Group” is, what question Mr. Sinclair responded to when he purportedly wrote that “Lots of people get hung up on how long” (wherein Mr. Sinclair is obviously speaking colloquially), why people were supposedly interested in how long, or whether Westchem based any action on rate.9

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8 CCX 283 and CCX 423 at 9, cited by Complaint Counsel, refer to the same e-mail. That e-mail contains a question being asked by an ECM customer; however, the customer is asking on behalf of another party that did not purchase the ECM additive. Moreover, RX 135 at 77 also states that “[i]t’s not important that it be exactly 5 years. We just need to be able to substantiate the biodegradable claim.”

9 The ALJ ruled that those communication logs contained hearsay because the notations (entered many years ago) were not created by Mr. Sinclair, but by an unidentified individual with the initials “ML.” Chappell, Tr. 856; CCX 423, at P. 9 (citing initials on right side of the entry).
That ECM Customers Conveyed the Naked Biodegradable Claim Without the Rate Claim Supports the Conclusion that Rate Was Immaterial

Complaint Counsel argue that the Rate Claim was material because several ECM customers repeated the Rate Claim in commerce. CCAB at 10–12. But Complaint Counsel dispose of that very argument for ECM by acknowledging the “even greater number of examples of customers passing on [not the Rate Claim but the] unqualified biodegradable claims …” CCAB at 11; see, e.g., RX 00–RX 34. Only about a dozen of ECM’s customers (out of around 300 hundred) copied the Rate Claim, as compared to the many others that included the unqualified Biodegradable Claim but not the Rate Claim in their advertising. CCX 235.

ECM customers repeated the Rate Claim only when also repeating other ECM claims, such as intrinsic biodegradability and shelf-life. Those customers featured the Rate Claim in

\[10\] See, e.g., CCX 33 (highlighting the fact that its ECM Plastic is “Biodegradable,” “Recycled,” “Environmentally Friendly,” “cost-effective,” and allows “[m]aterial performance properties and shelf life [to] remain intact, as biodegradation only occurs when in contact with out biodegrading material”);
CCX 34 (highlighting the fact that its ECM Plastic is “Biodegradable Film” and states that “[i]t is important to point out that biodegradation of the poly does not start until it is placed in an environment where biodegradation is taking place”);
CCX 37 at 2 (stating that the ECM Plastic is “biodegradable,” and listing many other beneficial aspects of ECM Plastic other than rate of biodegradation);
CCX 38 (same as CCX 37);
CCX 40 at 1 (stating that the ECM Plastic is “biodegradable (without regard to rate) when in the presence of microbial activity”);
CCX 44 (prominently featuring the fact that “THIS BAG IS 100% BIODEGRADABLE!”);
CCX 53 (stating that the company is “proud to announce [its] new line of 100% Biodegradable foam boards” and listing other beneficial aspects of the ECM Plastic);
CCX 57 (highlighting the fact that its ECM Plastic maintains “all the desired physical characteristics of [] standard calendered rigid vinyl products”);
CCX 102 (highlighting the fact that the product is “Biodegradable” without regard to rate);
CCX 105 (stating that the company “is proud to introduce [its] new line of biodegradable (without regard to rate) films and bags”);
CCX 134 (copying ECM’s bulleted claims);
relative obscurity compared to the other claims.\textsuperscript{11} Therefore, the presence of the Rate Claim in an extreme minority of ECM customer advertisements does not prove that the claim was material.

The fact that the vast majority of ECM customers removed the Rate Claim is affirmative evidence that the claim was not material. In those instances, \textit{see e.g.}, RX 00–RX 34, ECM customers omitted the Rate Claim and advertised the intrinsic biodegradability of the products. If the Rate Claim was indeed “important,” the overwhelming majority of ECM customers would not have removed it from their marketing. CCAB at 14 (explaining that in order to be material, a claim must be “important”).

4. \textbf{Evidence Affirmatively Proves that the Rate Claim Was Immaterial}

In its Opening Brief, ECM provided nine separate lines of evidence proving the Rate Claim immaterial. ROB at 21–39. Complaint Counsel’s arguments against those lines of evidence are based on conjecture, void of record support.

First, Complaint Counsel misconstrue Dr. Stewart’s testimony. Dr. Stewart did not testify that there is a “lack of consumer consensus about biodegradability.” CCAB at 12. To the

\textsuperscript{11} Id.
contrary, Dr. Stewart testified that his survey revealed it to be “highly unlikely that [certain ECM claims, including the Rate Claim] would be material to end use consumers …” RX 856 at 26. His survey belies the representation that consumers expect plastics to biodegrade within any set time, establishing instead that 98% of respondents understand that there are differences in the amount of time it takes for different types of products to biodegrade. ALJFF ¶550. Consumers interpret the term “biodegradable” to mean the process by which a product breaks down or decays; consumers understand that the time for that process varies depending on the materials involved; and that the process of biodegradability is not always, or even often, a rapid one. ALJFF ¶554. Based not on reliable record support but on extrapolation from Dr. Frederick’s unreliable Google Consumer Surveys and on manipulation of data selectively excerpted from Dr. Stewart’s survey, Complaint Counsel conclude, as if themselves appropriate substitutes for experts, “that a significant minority of consumers understand biodegradable to entail a one-to-five year timeframe for complete breakdown.” CCAB at 13; ALJID at 189–213; RB at 49–54, 73–76; RRB at 23–50; RAB at 18–34.12 Dr. Stewart directly testified that his surveys do not support that conclusion. Stewart, Tr. 2782–83, 2813–14; ALJID at 214–16.

ECM’s lengthy pre-purchase negotiations with prospective customers also weigh against a finding that the Rate Claim was material. ROB at Part III.A.2.b. Complaint Counsel failed to rebut that essential argument. The lengthy negotiations demonstrate that no one purchased ECM’s additive impulsively. Rather, ECM’s customers, adopted a studied process usually lasting more than six months to two years, wherein they evaluated the product critically and purchased the ECM additive based on their own assessment. Sullivan, Tr. 703–04; Sinclair, Tr.

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12 Dr. Stewart also determined that consumers are inherently skeptical of biodegradable claims, making them less likely to rely on same when purchasing. ALJID at 286–87; RB at 171–74.
Further, even if certain ECM customers “were not sophisticated in biodegradation,” CCAB at 14, we may not leap to the conclusion that they made their purchases based on the Rate Claim, particularly in the absence of any supporting evidence. Rather, those customers, all of whom are sophisticated business entities, carefully considered the evidence and circumstances (over the span of at least six months) before deciding to purchase the ECM additive and did not simply take ECM’s “word for it.” In short, ECM’s Plastic Company Purchasers were highly knowledgeable in the field of plastics and skeptical of biodegradability claims, even conducting independent testing of the products before purchase and use. See RB at Part III.F.2; RRB at Part V. No ECM customer relied on the Rate Claim in the same way that end-use consumers rely on an advertiser’s representations in marketing a retail product when making an impulse purchase. Without that reliance, the Rate Claim lacks materiality. See F.T.C. v. Wash. Data. Ress., 856 F. Supp. 2d 1247, 1272 (M.D. Fla. 2010) (“a representation is material if likely relied upon by a reasonable prospective purchaser”).

Complaint Counsel incorrectly state that “complete breakdown in one to five years after disposal is the Additive’s primary purported attribute.” CCAB at 14. Complaint Counsel cite no record evidence for that proposition. Repeatedly the record confirms that intrinsic biodegradability was the basis for purchase. Secondary material factors include the cost-effective alternative to bioplastics, and that the additive does not alter functional plastic properties. ROB at 30–33; RB at 182–84; RRB at 147–52; supra at note 10. There is no evidence that the Rate Claim factored into any purchasing decision. CCAB at 14 (citing Novartis, 127 F.T.C. at 695) (explaining that in order to be material, “a claim simply has to be an important factor in a customer’s purchasing decision”).
Complaint Counsel have ignored the argument that content in the Green Guides requiring claim qualification led ECM’s customers to be concerned with the rate of biodegradation. ROB at 34–36. The Green Guides coerced industry, including ECM, to include a specific rate qualifier in advertising biodegradable plastics. 16 C.F.R. § 260.8. The Green Guides made clear that a product cannot be “biodegradable” unless it would decompose into elements found in nature within a “short period of time” after the product was discarded. ROB at 34–36. To be sure, a rate as broad as 9 months to 5 years is, in effect, no assurance of a specific rate at all. That, when combined with ECM’s statements that ultimate rates for individual plastics were dependent on environmental conditions, reveal that the Plastic Company Purchaser had no basis to conclude that its specific plastic would biodegrade by any set time. Sinclair, Tr. 769; Sullivan, Tr. 711; RX 135. Indeed, the fact that there is no generally accepted ASTM method for identifying rates of biodegradation cuts against any presumption that the industry deemed rate scientifically discernible or material to a purchase. ALJFF ¶¶712–13.

B. A Broad Remedial Order Is Not Warranted

Competent and reliable scientific evidence from over twenty (20) anaerobic gas evolution tests prove that ECM’s technology renders conventional plastics biodegradable. ALJFF ¶¶1043–1465. Well-qualified experts support that conclusion. ALJID at 246–85. The ALJ found all ECM claims listed in the Complaint fully substantiated except for the Rate Claim. ALJID at 245–86. The ALJ based that decision on competent and reliable scientific evidence, most of which Complaint Counsel’s experts never evaluated.

The one claim found wanting—the Rate Claim—had no provable influence on purchases, and injured no consumers or customers. Supra at Part II.A; RB at 167–88; RRB at 134–57; ROB
at 18–39; ALJID at 300–01 at nn.58–59. As explained above, Dr. Stewart’s survey and nine separate lines of record evidence confirm the absence of materiality and thus compelled further proof from Complaint Counsel, which was not offered. The ALJ explained that “the absence of any proof of … consumer harm in this case militates against a broad remedial order,” and Complaint Counsel has not directly challenged that finding. See ALJID at 300. They offer no proof of “consumer harm,” threatened or actual. Other than sweeping speculation of harm generally, Complaint Counsel present no cogent argument that ECM’s “rate claim” in particular deceived anyone. Although Complaint Counsel allege that ECM created a “high likelihood of actual deception,” Complaint Counsel do not cite a factual basis for that position. See CCAB at 24–26. Complaint Counsel have not shown that a broad order against the narrow and long since discontinued “rate claim” is warranted.

1. **Dr. Michel’s Rebuttal Testimony Was Procedurally Improper**

   Dr. Michel’s limited opinion was insignificant to the outcome or the ALJ’s findings. He testified based on an incomplete review of the scientific evidence. RFF ¶2997 (explaining that Dr. Michel’s report does not mention any anaerobic test other than the one he performed). His single test’s data was inconclusive. He failed to evaluate critical elements of the test process. ALJID at ¶¶1466–96. He confessed ignorance of essential facts concerning the ECM additive and plastics. RFF ¶¶2940–44, 2950–54, 2956. As several other experts testified, Dr. Michel’s test environment plateaued across all products after a short period, making continued biodegradation testing impossible, and strongly suggesting that the test environment (not the plastic) was responsible for his inconclusive data. RRB at 98–99; ALJFF ¶¶798–99. Dr. Michel, whose research assistant performed most of the work, never evaluated whether the so-called “plateau” in biodegradation was attributable to the test plastic or the failure of test conditions.
RRB at 100 (citing Michel, Tr. 2961–62). He did not use a negative control comparable to the ECM plastic, rendering comparative analyses impossible. ECM experts explained that Dr. Michel needed to perform additional assessments to support a “negative” finding, but he never did so. ALJFF ¶¶800–07.

Critically, as Dr. Barlaz testified, the over 20 positive tests (not reviewed by Dr. Michel) confirm that the ECM additive causes plastics to biodegrade (generating methane far greater than could be produced by the inoculum and additive alone). ALJID at 284.

Dr. Michel employed the same test methodology used by the other laboratories credited by the ALJ in this case. ALJFF ¶¶1051–52, 1227, 1469. The so-called “peer review” of Dr. Michel’s work was substantively fictive, limited to a review of his methodology only, because he failed to supply the peer-reviewers with his underlying data. ALJFF ¶¶1483–96. Unlike Dr. Michel, ECM’s experts evaluated Dr. Michel’s data in context with the totality of the scientific evidence. ALJFF ¶¶1041, 1044; ALJID at 230–31, 253. They testified that the Michel study did not undermine the scientifically valid conclusions apparent from the dozens of positive tests. ALJID at 253–55. Indeed, while those positive tests affirmatively showed that the additive caused plastics to biodegrade, the lone Michel test was inconclusive, standing as evidence of a failed test, which, as ECM’s experts explained, was to be expected due to the fragility of biota in the test environment. Sahu, Tr. 1929–30, 1939–1943. Dr. Michel never evaluated the dozens of positive tests of record. He never performed the requisite statistical analyses of the scientific data. RFF ¶2999. He did not obtain his test plastic from ECM or make it in his lab but relied on Myers Industries, an ECM competitor (with an economic interest in test failure), for that. ALJFF

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13 Dr. Michel only tested polypropylene-based plastics and polystyrene plastics, which are not significant to ECM’s business. CCX 164 at 3. The large majority of ECM customers use the ECM technology in other applications, like polyethylene (PE).
¶¶1471, 1480–81. No chain of custody data or fact witness sponsor was presented to establish that ECM’s requirements for manufacture were satisfied. Dr. Michel had no knowledge of how the plastic he tested was manufactured. ALJFF ¶¶1472–74.

2. **Given the ALJ’s Findings, This Case Is Not in the Public Interest**

ECM’s Biodegradable Claims were supported by competent and reliable scientific evidence. ALJID at 262–85. The ALJ found, however, that ECM’s permanently discontinued Rate Claim was not substantiated. ALJID at 245–46. Concerning that claim, ECM explained that “mere deception” is alone not grounds to satisfy the public interest standard in an FTC proceeding. ROB at 39–43; *Klesner*, 280 U.S. at 27 (explaining that the “requirement is not satisfied by proof that there has been misapprehension and confusion on the part of purchasers, or even that they have been deceived”). Because no evidence demonstrates that Plastic Company Purchasers or consumers were injured by the rate claim, an order against ECM is not in the public interest.\(^\text{14}\) Indeed, the ALJ found that Complaint Counsel had produced no evidence of injury and, on that basis, the ALJ held a broad remedial order unwarranted. ALJID at 300 (“the absence of any proof of such consumer harm in this case militates against a broad remedial order”).

Complaint Counsel argue that a remedy against ECM’s Biodegradable Claim is in the public interest. *See* CCAB at 25–27. The argument omits its essential predicate. Whether an action against ECM’s Biodegradable Claim is within the public interest is irrelevant because

\(^\text{14}\) Complaint Counsel offered no proposed findings of fact that establish any consumer injury. *See generally* CCFF. Complaint Counsel cited no reliable documentation showing consumers (or customers) actually paid more for ECM plastics. The exhibits Complaint Counsel cites on page 25 of their Answering Brief do not stand for the proposition cited and provide no reliable basis (other than rank speculation) to conclude that end-consumers paid more for ECM plastics. Finally, even if that evidence existed, there remains none that ECM customers paid more for ECM plastic because of the Rate Claim, as opposed to the Biodegradable Claim—a claim found supported by the ALJ.
ECM proved its Biodegradable Claim substantiated, supported by competent and reliable scientific evidence.

Moreover, Complaint Counsel ignore the fact that ECM permanently discontinued the Rate Claim in 2013, and no longer uses that claim in marketing. ALJFF ¶259. No facts or law support Complaint Counsel’s alleged “high likelihood of actual deception” stemming from the discontinued advertising claim.\(^{15}\)

Complaint Counsel also misunderstand the import of scientific testimony in public interest and materiality analysis. Landfill expert Dr. Morton Barlaz testified that rapidly degrading landfill waste contributes to greenhouse gas emissions, making it more deleterious to the environment than slowly degrading waste. RB at 90–91. While the ALJ found ECM’s Rate Claim deceptive, the competent and reliable scientific evidence proved that ECM’s plastics were biodegradable in landfills where untreated plastics were not, ALJID at 262–85, and that ECM plastics are better for the environment than rapidly biodegrading products, such as the compostables. RB at 91 (citing Barlaz, Tr. 2285–86). Thus, when viewed in the context of the whole record, the facts show that if consumers were fully informed about the science of biodegradation, they should logically prefer that the product take longer than a year to biodegrade so that methane emissions are reduced. Barlaz, Tr. 2285–87.

\(^{15}\) As explained, supra, Complaint Counsel conflate the public interest analysis with an assessment of all ECM claims, rather than the Rate Claim found deceptive by the ALJ. Complaint Counsel’s rebuttal on the public interest factor is intertwined with their whole case theory and, thus, irrelevant unless this Commission overrules the entirety of the ALJ findings and conclusions. For example, Complaint Counsel tacitly acknowledge that their response depends on whether ECM’s technology works. Thus, Complaint Counsel argue that “ECM’s argument assumes that the product works ... but the evidence shows it does not.” CCAB at 28. The ALJ found that the evidence shows that the ECM additive does work, however, predicated on over 20 competent and reliable, independent scientific tests. ALJID at 262–85.
No evidence shows the Rate Claim presented a risk of injury or harm to the public. The claim no longer appears in commerce. The claim was, at most, merely deceptive without attendant risk to consumers. Thus, a broad remedial order is not in the public interest.

3. The Proposed Order Changes Environmental Policy Through Ultra Vires Agency Action

Complaint Counsel’s proposed order would destroy the market for products that biodegrade in periods exceeding one year—which, in landfills, represents almost every product. ALJFF ¶673 (finding that “not even tree trunks, orange peels, or banana peels – all generally accepted to be biodegradable in the environment – can reliably break down into elements found in nature within one year after customary disposal”). The undisputed evidence establishes several critical facts: (1) that even the most rapidly degrading substances take at least seven years to biodegrade completely in landfills, but they do still “biodegrade” (CCX 893 (Tolaymat, Rep. at 16); RX 853 (Barlaz, Rep. at 11)); (2) that substances which biodegrade within a few years in a landfill are more deleterious to the environment than those which biodegrade slowly over longer periods of time (Barlaz, Tr. 2285–87.); and (3) that no reliable scientific methodology can prove biodegradation “rates” or “extents” in landfill environments (ALJFF ¶¶ 712–13; ALJID at 239). That latter point is especially significant, because no expert in this case (including Complaint Counsel’s) could identify a reliable method to prove rates of biodegradation in landfills. Id. Particularly for products that biodegrade over many years, a laboratory cannot maintain viable test conditions to measure rates of biodegradation. ALJFF ¶¶728, 791–99.

Yet Complaint Counsel’s Proposed Order expressly precludes “biodegradation” claims unless “rate” qualified. CCOB at 51. Scientifically incompetent, that Order effectively bars all
biodegradation claims, even when, as here, competent and reliable scientific evidence proves the plastic “biodegradable.” ALJID at 262–85.

By erecting an impossibly high hurdle, Complaint Counsel’s proposed order imposes a prior restraint on protected speech, thus ensuring violation of the First Amendment—a point that Complaint Counsel utterly fails to address. See generally CCAB. But the “rate” requirement also exceeds the bounds of FTC regulation by bringing about a fundamental change in waste management policy.16 The FTC would effectively preclude marketing and advertising of environmentally beneficial products that biodegrade in landfills. Those products further EPA’s goals of reducing and managing landfill waste, while simultaneously limiting harmful greenhouse emissions. RX 967 at 3 (noting that the EPA’s mission is to collect methane produced at landfills). Complaint Counsel’s Proposed Order thus conflicts with EPA waste management regulation and causes FTC to presume authority beyond its enabling statute.17

Complaint Counsel have for years maintained a flawed theory that “faster biodegradation is better” in landfills. Landfills, which are designed for infinite storage, benefit more from slower-degrading materials. Barlaz, Tr. 2287–88. Complaint Counsel’s attempt to revise waste management policies through the Proposed Order would indeed be ultra vires agency action.

16 Complaint Counsel mislead by arguing that “there is no support for ECM’s assertion that its technology will result in fewer methane emissions.” CCAB at 29. ECM does not contend that its product “reduces methane omissions” but rather that it enables such emissions to be collected in EPA’s methane gas collection program while more rapidly biodegrading products favored by FTC produce methane emissions that are not collectable. Barlaz, Tr. 2285–87. The Proposed Order is not in the public interest and is ultra vires because it embraces flawed science, erects an insurmountable burden on protected speech, and encroaches on the EPA’s exclusive statutory province. Nothing in Complaint Counsel’s Answering Brief addresses those critical points.

III. CONCLUSION

For the foregoing reasons, the Commission should reverse the ALJ holding that the Rate Claim was material and that action against the Rate Claim is in the public interest, and should find Complaint Counsel's Proposed Order unsupported, in violation of the First Amendment, and to require *ultra vires* agency action. The Commission should deny and dismiss the Complaint and take no action against Respondent ECM Biofilm pled for in the Complaint.

Respectfully submitted,

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DATED: April 8, 2015
CERTIFICATE OF SERVICE

I hereby certify that on April 8, 2015, one original and twelve copies of Respondent ECM BioFilms’ Brief in Reply to Complaint Counsel’s Answering Brief, were mailed via UPS Overnight Air:

Donald Clark, Secretary
Federal Trade Commission
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I hereby certify that this is a true and correct copy of Respondent ECM BioFilms’ Brief in Reply to Complaint Counsel’s Answering Brief, and that on April 9, 2015, I caused the foregoing to be served electronically to the following:

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