Cloudy Evidentiary Standards: Making Sense of the FDA's "Appropriate for the Protection of the Public Health Standard"

Andrew Towriss[*]

I. INTRODUCTION

On August 8, 2016, the Food and Drug Administration (FDA) deemed e-cigarettes as tobacco products and thus under the regulatory authority of the agency.[1] Statutorily, this required e-cigarette companies to comply with the Tobacco Control Act and to not market their products without prior approval from the FDA. E-cigarette manufacturers ignored these regulations,[2] and from September 2014 to

[*] J.D. Candidate, Seton Hall University School of Law, Class of 2024; B.A., Boston College, Morrissey College of Arts and Sciences, Class of 2020. I wish to extend special thanks to the following: Professor Doron Dorfman for his guidance and support in drafting this comment; my wonderful parents David and Karen Towriss for their love and support throughout law school; my lovely girlfriend Courtney Babb and our cat Reba for always keeping me positive; and the hardworking editors of Volume 48 for preparing this comment for publication.

[1] Deeming Tobacco Products to be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Restrictions on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products, 81 Fed. Reg. 28973 (May 10, 2016).

[2] Fatma Romeh M. Ali, Megan C. Diaz, Donna Vallone, et al., *E-Cigarette Unit Sales by Product and Flavor Type — United States, 2014–2020*, CTR. FOR DISEASE CONTROL (Sept. 18,

May 2020, profits increased from $304.2 million to $2.06 billion.[3] Yet, the FDA did not approve the first e-cigarette of any kind for market until October 12, 2021.[4] This means every e-cigarette marketed by tobacco companies between August 8, 2016 and October 12, 2021, had been marketed illegally.[5] This proliferation of e-cigarettes increased youth exposure to vapes and, by 2022, the FDA estimated more than 2.5 million high and middle school students used e-cigarettes.[6]

By going straight to market, e-cigarette manufacturers ignored the Premarket Tobacco Authorization (PMTA) requirement of the Family Smoking Prevention and Tobacco Control Act (TCA).[7] PMTAs are applications that companies submit to the FDA to receive approval for new tobacco products approval, which is mandatory prior to marketing the products.[8] The TCA authorizes the FDA to approve only the PMTAs of e-cigarette products that meet the "Appropriate for the Protection of the Public Health Standard" (APPH).[9] To assist applicants drafting PMTAs, the FDA published guidance documents in 2016,[10] 2019,[11] and

2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6937e2.htm?s_cid=mm6937e2_w [https://doi.org/10.15585/mmwr.mm6937e2].

3 Press Release, FTC, The Federal Trade Commission's First Report on E-Cigarette Sales and Advertising Reveals Disturbing Trends Affecting the Health of Young Americans (Mar. 17, 2022), https://www.ftc.gov/news-events/news/press-releases/2022/03/federal-trade-commissions-first-report-e-cigarette-sales-advertising-reveals-disturbing-trends.

4 *See* Press Release, FDA, FDA Permits Marketing of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

5 *See* 21 U.S.C. § 387j (explaining that a new tobacco product is not allowed on market without FDA approval); Eric Lindblom, *The Tobacco Control Act's PMTA & MRTP Provisions Mean to Protect the USA From Any New Tobacco Products That Will Not Reduce Health Harms — But FDA Isn't Cooperating*, J. OF HEALTH CARE L. & POL'Y (Jan. 2, 2019) (explaining that e-cigarettes illegally on the U.S. market have been free from enforcement efforts statutorily required of new products).

6 FDA, *Results from the Annual National Youth Tobacco Survey* (Dec. 20, 2022), https://www.fda.gov/tobacco-products/youth-and-tobacco/results-annual-national-youth-tobacco-survey#2022%20Findings (stating that 14.1 percent of high school students report having used an e-cigarette within the last thirty days).

7 21 U.S.C. § 387j(2).

8 *See* Am. Acad. of Pediatrics v. FDA, 399 F. Supp. 3d 479, 487 (D. Md. 2019).

9 21 U.S.C. § 387g(a)(3)(A)–(B).

10 FDA, PREMARKET TOBACCO PRODUCT APPLICATIONS FOR ELECTRONIC NICOTINE DELIVERY SYSTEMS: GUIDANCE FOR INDUSTRY (May 2016).

11 FDA, PREMARKET TOBACCO PRODUCT APPLICATIONS FOR ELECTRONIC NICOTINE DELIVERY SYSTEMS: GUIDANCE FOR INDUSTRY (June 2019) (hereinafter "2019 Guidance").

2020.[12] For each iteration of the guidance, applicants and industry experts were allowed to provide input and recommendations and ask clarifying questions, ultimately resulting in the 2020 Final Guidance.[13] Applicants based the contents of their PMTAs on the 2019 and 2020 guidance documents and the content regulations laid out in the Code of Federal Regulations.[14]

After delays from the agency in setting a deadline for submission, a district court intervened and mandated that the FDA set the final deadline for PMTA submission as September 9, 2020.[15] In accordance with the final deadline, the FDA received applications for 6.5 million products from five hundred companies.[16] By February 16, 2021, the FDA had processed applications for 4.8 million products submitted by the deadline.[17] On August 26, 2021, the FDA issued its first wave of Marketing Denial Orders (MDOs).[18] The FDA rejected fifty-five thousand flavored e-cigarette products for "failure to provide evidence [that the products] appropriately protect the public health."[19] The MDOs prohibited manufacturers from marketing their products and required them to remove any unapproved product currently on the market.[20] While manufacturers were allowed to reapply for approval, many manufacturers opted to challenge the FDA's rulings in court instead.

The legal challenges by tobacco manufacturers question whether the FDA had acted in an "arbitrary and capricious" manner when

12 FDA, ENFORCEMENT PRIORITIES FOR ELECTRONIC NICOTINE DELIVERY SYSTEMS (ENDS) AND OTHER DEEMED PRODUCTS ON THE MARKET WITHOUT PREMARKET AUTHORIZATION (REVISED) (April 2020) (hereinafter "2020 Guidance").

13 *Id.*

14 21 C.F.R. § 1114.7(a)–(m).

15 *Id.*

16 Press Release, FDA, FDA Issues Refuse to File (RTF) Letter to JD Nova Group LLC (Aug. 9, 2021), https://www.fda.gov/tobacco-products/ctp-newsroom/fda-issues-refuse-file-rtf-letter-jd-nova-group-llc.

17 Press Release, Mitch Zeller, Dir. of the FDA's Center for Tobacco Products, Perspective: FDA's Progress on Review of Tobacco Product Applications Submitted by the Sept. 9, 2020 Deadline (Feb. 16, 2021), https://www.fda.gov/tobacco-products/ctp-newsroom/perspective-fdas-progress-review-tobacco-product-applications-submitted-sept-9-2020-deadline.

18 Press Release, FDA, FDA Denies Marketing Applications for About 55,000 Flavored E-Cigarette Products for Failing to Provide Evidence They Appropriately Protect Public Health (Aug. 26, 2021), https://www.fda.gov/news-events/press-announcements/fda-denies-marketing-applications-about-55000-flavored-e-cigarette-products-failing-provide-evidence.

19 *Id.*

20 *Id.*

denying the applications of flavored e-cigarette products.[21] The answer regarding the FDA's discretionary authority on how to review PMTAs has been left open due to a circuit split. The DC Circuit, Third Circuit, Fourth Circuit, and Ninth Circuit upheld the FDA's MDOs,[22] while the Eleventh Circuit and Fifth Circuit deemed the FDA's MDOs were arbitrary and capricious.[23] The litigation has boiled down to two key issues: (1) whether the FDA should be required to review applicant's marketing and sales access restriction plans[24] and (2) whether the FDA has provided clear evidentiary standards that applicants can comply with.[25]

This Comment focuses on the FDA's application and development of APPH[26] when reviewing flavored versus tobacco-flavored e-cigarette PMTAs.[27] Part II of this Comment lays the groundwork for the FDA's e-cigarette regulations through the TCA, the FDA's guidance documents,[28]

---

21 *See* Bidi Vapor LLC v. U.S FDA, 47 F.4th 1191, 1195 (11th Cir. 2022); Breeze Smoke, LLC v. U.S. FDA, 18 F.4th 499, 502 (6th Cir. 2021).

22 *See* Prohibition Juice Co. v. U.S. FDA, 45 F.4th 8, 25 (D.C. Cir. 2022); Logic Tech. Dev. LLC v. United States FDA, 84 F.4th 537, 557 (3d Cir. 2023); Avail Vapor, LLC v. U.S. FDA, 55 F.4th 409, 428 (4th Cir. 2022), *cert denied*, 144 S. Ct. 277 (2023); Lotus Vaping Techs., LLC v. FDA, 73 F.4th 657, 661 (9th Cir. 2023).

23 *See* Wages & White Lions Invs., L.L.C. v. FDA, No. 21-60766, 2024 U.S. App. LEXIS 133, at *5 (5th Cir. Jan. 4, 2024); *Bidi Vapor LLC*, 47 F.4th at 1195.

24 *See Prohibition Juice Co.*, 45 F.4th at 25 (explaining that a marketing and sales access restriction plan is a strategy that an applicant e-cigarette company provides to the FDA to highlight how the company would prevent underage persons from accessing their e-cigarette products if approved for market. For example, a company will typically state it would require its products to only be sold in stores that have methods of verifying legal identification. While the FDA's MDO will be upheld, it likely should have provided a closer review of the applicant's marketing plans). *But see Wages & White Lions Invs.*, 2024 U.S. App. LEXIS at *5 (5th Cir. Jan. 4, 2024) (holding that it was arbitrary and capricious for the FDA to no longer consider marketing plans important and to impose a de facto ban on flavored e-cigarette sales); *Bidi Vapor LLC,* 47 F.4th at 1206 (holding that the FDA informed applicants that the marketing plans would be fundamental to making determinations about product approval and therefore failure to do so was a material defect).

25 *See Lotus Vaping Techs.*, 73 F.4th at 672 (holding that the FDA's use of conditional language throughout the process supports that it did not change its evidentiary standards during review); *Prohibition Juice Co.*, 45 F.4th at 21 (holding that the FDA did not change the evidentiary standard for applicants without prior and proper notice); *Breeze Smoke*, 18 F.4th at 507 (holding that the FDA was right in finding the applicant's evidence failed to meet the appropriate health standards).

26 *See* 21 U.S.C. § 387f(d)(1).

27 For the purposes of this Comment, "flavored e-cigarettes" generally refers to vape products that are flavored anything other than tobacco. Typically, this would include candy flavors, fruit flavors, or food flavors. Some states will consider menthol to be a flavored e-cigarette. Meanwhile, tobacco-flavored e-cigarettes are specifically e-cigarettes designed to replicate the flavors of tobacco in combustible cigarettes.

28 *See* 2019 Guidance, *supra* note 11; 2020 Guidance, *supra* note 12.

and the issuance of the final rule in the CFR.[29] Part III of this Comment discusses the competing perspectives in e-cigarette regulations and establishes a theoretical framework to help define what the goals of the FDA's e-cigarette regulations should be. Part IV analyzes court opinions on whether the FDA must review applicants' marketing and sales-access restriction plans. Part V analyzes Marketing Granted Orders, Marketing Denial Orders, and court decisions to critique and clarify the evidentiary standard that the FDA has imposed on applicants. Overall, this Comment argues that the FDA should be required to review marketing plans in order to establish clear standards for product approval. This would enhance public knowledge of which marketing methods are and are not acceptable and help insulate the agency from future litigation.

This Comment does not argue that the FDA should have to change its decisions on any e-cigarette PMTAs; it simply seeks to provide clarity in how the FDA is applying APPH in its review process. The FDA's failure to provide clear evidentiary standards while still approving tobacco-flavored e-cigarettes leaves the FDA susceptible to litigation over its application of the APPH. The FDA, however, can reinstall public confidence in its decision-making by creating transparent standards for product approval.

II. DEVELOPMENT OF THE TOBACCO CONTROL ACT AND ITS APPLICATION TO E-CIGARETTES

The FDA's first attempt at regulating tobacco products occurred in 2000 when the Supreme Court ruled that the FDA had no authority to regulate tobacco products under the Federal Food, Drug, & Cosmetic Act.[30] Nine years later, Congress responded by passing the Family Smoking Prevention and Tobacco Control Act ("TCA"), which granted the FDA broad regulatory power over tobacco products.[31] While the TCA applies to "tobacco products," the original text limited the scope of the act to "cigarettes, cigarette tobacco, roll-your-own tobacco, and smokeless tobacco . . . ."[32] It was not until 2016, seven years after the

29 Premarket Tobacco Product Applications and Recordkeeping Requirements, 21 C.F.R §§ 1100, 1107, 1114 (Nov. 4, 2021) (hereinafter "Final Rule").

30 FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 161 (2000) (holding that because the FDCA did not reference the FDA's regulatory authority over tobacco products, the FDA therefore had no authority to regulate tobacco products).

31 21 U.S.C. § 387–387(v).

32 21 U.S.C. § 387a(a).

passing of the TCA, that the FDA "deemed" e-cigarettes, among other products, a tobacco product.[33]

Under the TCA, the FDA requires tobacco producers to submit PMTAs for any "new tobacco product," defined as "any tobacco product (including those in test markets) that was not commercially marketed in the United States as of February 15, 2007."[34] The FDA has the regulatory authority to prohibit manufacturers from selling and distributing new tobacco products without premarket approval.[35] A PMTA is expected to include "full reports of information," ingredients, methods used in the facilities, provide samples to the Secretary, and "other information relevant."[36] PMTAs are required to contain "full reports of all information published, known to, or which should reasonably be known to [an applicant], concerning investigations that have been made to show the health risks of [a] new tobacco product and whether it presents less risk than other tobacco products."[37] An applicant must submit a PMTA for each individual tobacco product it wants to market.[38] The FDA addresses each application independently, meaning that a manufacturer's PMTA for one product will not have a bearing on the approval or denial of its other products.[39]

When reviewing an application, the FDA is statutorily required to utilize APPH.[40] To meet APPH, a manufacturer needs to: (1) weigh the risks and benefits of the product to users and nonusers of tobacco; (2) show whether the product will increase or decrease existing users of tobacco products' current tobacco consumption habits; and (3) show whether the product will encourage those who do not currently use tobacco products to begin consumption.[41] APPH requires the FDA to weigh whether the introduction of the tobacco product under review would be "appropriate for the protection of the public health with respect to the risk and benefits to the *population as a whole*, including

33 *See* 81 Fed. Reg. 28974 (May 10, 2016); Sottera, Inc. v. FDA, 627 F.3d 891, 898 (D.C. Cir. 2010) (holding that the FDA had to regulate e-cigarettes under the TCA because they could be considered a tobacco product rather than a drug or device).

34 21 U.S.C. § 387j(1)(A).

35 21 U.S.C. § 387f(d)(1).

36 21 U.S.C. § 387j(b)(1)(A)–(G).

37 2019 Guidance, *supra* note 11, at 1.

38 2019 Guidance, *supra* note 11, at 1.

39 *See* FDA, *Premarket Tobacco Product Applications* (March 7, 2022), https://www.fda.gov/tobacco-products/market-and-distribute-tobacco-product/premarket-tobacco-product-applications ("Each product in a grouped submission is considered a separate, individual application . . . .").

40 21 U.S.C. § 387f(d)(1).

41 *Id.*

users and nonusers of the tobacco product."[42] As a whole, this means that the FDA cannot solely analyze impacts on one subpopulation (i.e., smokers, non-smokers, elderly) but rather must consider the population in its totality.[43] As such, this element resembles a balancing test where the FDA needs to weigh the potential impacts of product approval across a variety of populations. Furthermore, the FDA must consider "the increased or decreased likelihood that existing users of tobacco products will stop using such products" and "the increased or decreased likelihood that those who do not use tobacco products will start using such products."[44]

APPH, however, can be difficult to apply. For one, the TCA is silent "as to how large the likelihood and size of the expected public health gains" from the new product must be in comparison to the potential public health harms.[45] The FDA has not drawn a bright line of what an APPH showing would be,[46] but on June 11, 2019, the FDA released a nonbinding guidance document in an effort to provide further clarity to applicants.[47] The guidance begins with the disclaimer that the FDA is statutorily required to make APPH determinations; therefore, the guidance is nonbinding and simply instructive of the agency's current thoughts.[48] The document recommended applicants provide "specific information pertaining to different topic areas and scientific disciplines to enable FDA to make a determination of whether [a] PMTA supports a showing that permitting the marketing of [a] new tobacco product would be APPH."[49] Applicants could also "propose specific restrictions

42 *Id.* (emphasis added).

43 21 U.S.C. § 387g(a)(3)(B); *see also* Eric N. Lindblom, *What Is "Appropriate for the Protection of the Public Health" Under the U.S. Tobacco Control Act?*, 74 FOOD & DRUG L.J. 523 (2019) (explaining that while the FDA is allowed to weigh the impacts on sub-populations, its baseline reasoning must be predicated on the impact to the general population. While impacts to sub-populations play into that, they will never tell the full story).

44 21 U.S.C. § 387f(d)(1)(A)–(B).

45 Eric N. Lindblom, *The Tobacco Control Act's PMTA & MRTP Provisions Mean to Protect the USA From Any New Tobacco Products That Will Not Reduce Health Harms — But FDA Isn't Cooperating*, 23 J. HEALTH CARE L. & POL'Y 121, 128 (2021).

46 *Id.*

47 Michael Nedelman, *FDA Gives Vaping Companies a Clearer Path for Marketing Their Products*, CNN (June 11, 2019, 1:06 PM), https://www.cnn.com/2019/06/11/health/fda-tobacco-ecigarette-vaping-guidelines-bn.

48 2019 Guidance, *supra* note 11, at 1.

49 2019 Guidance, *supra* note 11, at 12.

on sale and distribution" and are permitted to "conduct certain investigations themselves and submit their own research findings."[50]

Further, the FDA did not expect to require "long-term studies to support" an application, but noted that applicants and the agency itself could utilize available public literature and short-term studies to make scientific determinations as to whether a tobacco product is APPH.[51] The guidance ultimately explains that the FDA will "weigh all of the potential benefits and risks from the information contained in the PMTA to make an overall determination of whether the product should be authorized for marketing."[52]

In 2020, the rapidly increasing youth-vaping population spurred the agency to revise its guidance document to provide new enforcement priorities.[53] In contrast to the 2019 guidance, which focused on limiting youth access, the 2020 guidance acknowledged that focusing on how the products are sold and conceiving of sales-restriction plans "would not appropriately address youth use."[54] Instead, the 2020 guidance noted that flavored e-cigarettes pose a greater risk for youth abuse than tobacco-flavored e-cigarettes.[55] The agency also noted that it would prioritize enforcement against "flavored cartridge-based ENDS products (except for tobacco or menthol-flavored products)."[56] The agency defines cartridge-based systems as e-cigarettes that "consists of, includes, or involves a cartridge or pod that holds liquid that is to be aerosolized through product use[d]."[57] A cartridge or pod is "any small, enclosed unit designed to fit within or operate as part of an electronic nicotine delivery system."[58]

In rolling out guidance for applicants to meet APPH, the FDA had a variety of practical considerations to balance. The role of the FDA is unique in that its decisions impact research, products, and public knowledge.[59] For example, a ban on e-cigarettes might confuse the public into thinking that combustible cigarettes are safer than e-

50 2019 Guidance, *supra* note 11, at 12.
51 2019 Guidance, *supra* note 11, at 12–13.
52 2019 Guidance, *supra* note 11, at 12.
53 2020 Guidance, *supra* note 12.
54 2020 Guidance, *supra* note 12, at 21.
55 2020 Guidance, *supra* note 12, at 18, 21.
56 2020 Guidance, *supra* note 12, at 10.
57 2020 Guidance, *supra* note 12, at 9.
58 2020 Guidance, *supra* note 12, at 9.
59 Larisa Svirsky, Dana Howard & Micah L. Berman, *E-Cigarettes and the Multiple Responsibilities of the FDA*, 22 AM. J. OF BIOETHICS 5, 10–11 (2021) [https://doi.org/10.1080/15265161.2021.1907478].

cigarettes since combustible cigarettes are allowed on the market.[60] Additionally, the regulations the agency enforces have an impact on how manufacturers produce products and advertisements, which affects the public's knowledge of e-cigarettes and access to the products.[61] The FDA's decision to approve a product may assist one individual in waning off combustible cigarettes while simultaneously encouraging a separate individual to begin nicotine consumption. In balancing the competing roles of the FDA, the agency has had to delicately create the product application process.

While the FDA's regulations and recommendations touch on the important elements, there is a level of depth missing in them that has produced more confusion than clarity. The proceeding section will illuminate a theoretical framework for the roles the FDA plays in producing both regulations and public health knowledge for e-cigarettes. This framework helps to inform why the FDA typically avoids more direct regulations and standards in PMTAs.

III. THEORETICAL FRAMEWORK AND PERSPECTIVES

In understanding the legal challenges to the FDA's MDOs, it is important to recognize the perspectives at play. The FDA faces pressure from e-cigarette manufacturers and vape shops to create policies that provide a pathway forward for flavored e-cigarettes to hit the market. Additionally, most adult e-cigarette users prefer flavored e-cigarettes versus menthol and tobacco-flavored counterparts.[62] Some advocates argue that adults should have the freedom to choose what substances they consume, especially when more dangerous products are legally allowed.[63] Likewise, there are some public health experts who believe that the regulation of e-cigarettes needs to take a harm-reduction approach and that any outright ban on flavored e-cigarettes is unethical

60 Svirsky et al., *supra* note 59.

61 Svirsky et al., *supra* note 59.

62 *See* Christopher Russell et al., *Changing Patterns of First E-Cigarette Flavor Used and Current Flavors Used by 20,836 Adult Frequent E-Cigarette Users in the United States*, 15 HARM REDUCTION J. 33, 7–8 (June 28, 2018) (showing that most combustible cigarette smokers who switched to e-cigarette use between 2013 to 2016 had done so using flavored e-cigarettes as opposed to tobacco e-cigarettes. The conclusion draws that reducing adult access to flavored e-cigarettes could discourage adults from switching from combustible cigarettes) [https://doi.org/10.1186/s12954-018-0238-6].

63 *See, e.g.*, Leah Sottile, *The Right to Vape*, THE ATLANTIC (Oct. 8, 2014), https://www.theatlantic.com/health/archive/2014/10/the-right-to-vape/381145/.

because of how knowingly harmful combustible cigarettes are to people.[64]

To the contrary, advocates for stricter e-cigarette regulations contend that the industry's claim that e-cigarettes are an effective smoking cessation aid are cloudy. For example, advocacy groups have pointed out there is no clear link between ceasing smoking and using e-cigarettes and highlight that e-cigarette usage often creates so-called "dual users."[65] Additionally, e-cigarettes pose a heightened risk of introducing non-smokers to nicotine, which would mitigate any potential public health benefits.[66] Likewise, regulation advocates note that rhetoric of "liberty" and "individual choice" has been a longstanding talking point of the tobacco industry,[67] which, notably, is now heavily invested in e-cigarette manufacturing.[68] Discussions of individual choice are also difficult to make when the youth have become a primary target of e-cigarette advertisements.[69]

---

64 *See* Lynn T. Kozlowski & David B. Abrams, *Obsolete Tobacco Control Themes Can Be Hazardous to Public Health: The Need For Updating Views on Absolute Product Risks and Harm Reduction,* 16 BMC PUBLIC HEALTH 432 (2016) [https://doi.org/10.1186/s12889-016-3079-9]; David B. Abrams et al., *Harm Minimization and Tobacco Control: Reframing Societal Views of Nicotine Use to Rapidly Save Lives*, 39 ANN. REV. PUB. HEALTH 193, 194 (2018) (explaining that flavored e-cigarettes have the potential to reduce adult reliance on combustible cigarettes) [https://doi.org/10.1146/annurev-publhealth-040617-013849].

65 Daniel G. Aaron, *Tobacco Reborn: The Rise of E-Cigarettes and Regulatory Approaches*, 25 LEWIS & CLARK L. REV. 827, 861-62 (2021) (stating that "dual use" of both e-cigarettes and combustible cigarettes is a "common trap" for people looking to quit smoking., and the effects of dual use mitigate public health claims because individuals end up consuming more nicotine).

66 *See* Kaitlyn M. Berry et al., *Association of Electronic Cigarette Use with Subsequent Initiation of Tobacco Cigarettes in US Youths*, JAMA NETWORK OPEN (Feb. 1, 2019).

67 *See* Lissy C. Friedman et al., *Tobacco Industry Use of Personal Responsibility Rhetoric in Public Relations and Litigation: Disguising Freedom to Blame as Freedom of Choice*, 105 AM. J. PUB. HEALTH 250 (2015) [https://doi.org/10.2105/AJPH.2014.302226].

68 Matt Kaplan, *Juul Closes Deal with Tobacco Giant Altria,* N.Y. TIMES, (Dec. 20, 2018), https://www.nytimes.com/2018/12/20/health/juul-reaches-deal-with-tobacco-giant-altria.html.

69 *See* Micah L. Berman, *The Faltering Promise of FDA Tobacco Regulation*, 12 ST. LOUIS U. J. OF HEALTH L. & POL'Y 145, 148 (2018) (citing U.S. v. Philip Morris USA, Inc. 449 F. Supp. 2d 1 (D.D.C. 2006) (noting that tobacco companies have a long history of advertising to the youth, who once they start smoking are much more likely to continue as adults, which minimizes the ability for companies to make arguments about liberty and choice)); *accord* Karen A. Cullen et al., *Notes From the Field: Use of Electronic Cigarettes and Any Tobacco product Among Middle and High School Students — United States, 2011–2018*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Nov. 16, 2018) (showing that roughly 20 percent of high school students now use e-cigarettes).

To balance the interests of vape shop owners and harm-reductionists with those of parents and public health experts, it is important to establish a theoretical framework for the varying roles of the FDA in implementing e-cigarette regulations. Researchers have theorized the FDA has four primary roles in informing the public about e-cigarettes: (1) as a knowledge purveyor, (2) as a knowledge producer, (3) as an advisor, and (4) as a market agent.[70] As a knowledge purveyor, the FDA's role is to disseminate information regarding e-cigarettes to the public, rather than relying on tobacco companies to provide this information and marketing material.[71]

As a knowledge producer, the FDA conducts scientific research and helps determine the health effects of e-cigarettes.[72] The FDA "plays an active role in knowledge. As both a regulator and a source of research funding, it shapes the agenda for scientific research on nicotine and tobacco products."[73] As a knowledge producer, the FDA needs to consider "historical precedent" of previous market-interrupters to the tobacco industry (i.e., filtered cigarettes) and consider similar health claims about various alternatives that have been made throughout the years as a ploy of the tobacco industry marketing.[74] Likewise, sources of research funding (such as tobacco industry funding e-cigarette research) make it imperative that the FDA produces knowledge that considers whether certain biases exist and the quality of research being conducted.[75] Lastly, as a knowledge producer, the FDA must acknowledge the "time required for evidence-gathering," which means to neither smear e-cigarettes as dangerous nor label them as a safe alternative before the agency has had the time to conduct proper long-term studies.[76]

The FDA also has a role as an advisor to "offer practical guidance on the basis of the evidence as it becomes available."[77] The FDA's advice directly affects individuals' actions.[78] As a result, the FDA is not simply providing information that gives individuals a choice. The agency is changing the way people behave.[79] Lastly, the FDA plays a role as a

70 Svirsky et al., *supra* note 59, at 6.
71 Svirsky et al., *supra* note 59, at 7.
72 Svirsky et al., *supra* note 59, at 7.
73 Svirsky et al., *supra* note 59, at 7.
74 Svirsky et al., *supra* note 59, at 8.
75 Svirsky et al., *supra* note 59, at 8.
76 Svirsky et al., *supra* note 59, at 9.
77 Svirsky et al., *supra* note 59, at 10.
78 Svirsky et al., *supra* note 59, at 11.
79 Svirsky et al., *supra* note 59, at 11.

market agent because it can "change the options available to the public and to corporations."[80] These four roles inform how the FDA should shape e-cigarette discourse and regulation. The FDA has a responsibility to curate scientific information, produce sound public knowledge, provide effective public guidance, and regulate the market ethically for both consumers and producers.

Thus, it is the FDA's responsibility to create public policy that effectively acknowledges the claims of harm reductionists while mitigating the potential danger to children. The following analysis of the recent circuit splits questioning the FDA's regulation will attempt to reconcile these competing perspectives. This Comment will analyze competing circuit decisions to determine which circuits afford the FDA the necessary discretion to act as a successful market regulator.

IV. HOW LITIGATION IS SHAPING APPH

In August 2021, the FDA finally tested its guidance documents and statutory obligations and began issuing MDOs against flavored e-cigarette companies.[81] In response to the issuance of fifty-five thousand MDOs,[82] e-cigarette manufacturers sued the FDA in the D.C.,[83] Fourth,[84] Fifth,[85] Sixth,[86] Seventh,[87] Ninth,[88] and Eleventh[89] circuits. The FDA's decision not to review the sales restriction and marketing plan of the plaintiffs (all flavored e-cigarette manufacturers) spurred the litigation. Whether the courts realize it or not, providing decisions on whether the FDA must consider the sales-restriction plans of applicants has become essential to clarifying the standards behind APPH. An examination of the courts' reasoning as to why or why not the FDA must review sales restrictions and marketing plans will help elucidate the standard going forward.

---

80 Svirsky et al., *supra* note 59, at 11.

81 Press Release, FDA, FDA Denies Marketing Applications for About 55,000 Flavored E-Cigarette Products for Failing to Provide Evidence They Appropriately Protect Public Health (Aug. 26, 2021), https://www.fda.gov/news-events/press-announcements/fda-denies-marketing-applications-about-55000-flavored-e-cigarette-products-failing-provide-evidence.

82 *Id*.

83 Prohibition Juice Co. v. U.S. FDA, 45 F.4th 8 (D.C. Cir. 2022).

84 Avail Vapor, LLC v. U.S. FDA, 55 F.4th 409 (4th Cir. 2022).

85 Wages & White Lion Invs v. FDA, No. 21-60766, 2024 U.S. App. LEXIS *133 (5th Cir. 2024).

86 Breeze Smoke, LLC v. U.S. FDA, 18 F.4th 499 (6th Cir. 2021).

87 Gripum, LLC v. U.S. FDA, 47 F.4th 553 (7th Cir. 2022).

88 Lotus Vaping Techs., LLC v. FDA, 73 F.4th 657 (9th Cir. 2023).

89 Bidi Vapor LLC v. U.S FDA, 47 F.4th 1191 (11th Cir. 2022).

In legal challenges to the FDA's issuance of MDOs, courts are split on whether the FDA's decision to give no consideration to companies' marketing and sales restriction plans is an arbitrary and capricious decision. The split hinges on whether courts believe that the FDA over-emphasized the importance of marketing plans in its guidance documents for applicants.[90] A careful consideration of whether the FDA should be required to review the marketing and sales access plans is important to develop a fair definition of how APPH is applied and what applicants can expect.

Circuits that have upheld the FDA's issuance of MDOs without a review of an applicant's marketing and sales access restriction plan have indicated that the decision is within the FDA's authority and consistent with the guidance the agency has provided. For example, the Ninth Circuit noted that the applicants had offered the FDA a plan containing "materially identical measures to those that the FDA had already described as insufficient."[91] Accordingly, the applicants could not argue that they had suffered prejudice as a result of the FDA's lack of individualized review because they did submit a unique or novel marketing plan.[92] Similarly, the Third Circuit noted that applicants had failed to establish how a review of its marketing plan would have made up for the numerous deficiencies contained within the rest of its reviewed application.[93] The crux of the Third Circuit's and Ninth Circuit's decisions was that the applicants had not shown that a review of their marketing plans would change the FDA's decision to issue an MDO.[94]

In contrast, the Eleventh Circuit and Fifth Circuit differed by requiring the FDA to review PMTAs independently and holistically. The Eleventh Circuit's decision interpreted the marketing and sales-access-restriction plans as an essential part of the APPH requirement.[95] Likewise, it agreed with the petitioning e-cigarette companies (six in total) that marketing and sales-access-restriction plans "directly

90 *See Lotus Vaping Techs.*, 73 F.4th at 657 (holding that the applicant's failure to include non-novel marketing and sales access restrictions plan enabled the FDA to issue an MDO without reviewing the applicant's plan). *But see Bidi Vapor LLC*, 47 F.4th at 1204 (holding that the FDA's statements about the importance of sales and marketing restriction plans created a material reliance by applicants that these factors would be considered, therefore, a failure by the FDA to consider the sales access plans was arbitrary).

91 *See Lotus Vaping Techs*, 73 F.4th at 674.

92 *Id*.

93 Liquid Labs, LLC v. U.S. FDA, 52 F.4th 533, 544 (3d Cir. 2023).

94 *See Lotus Vaping Techs*, 73 F.4th at 675; *Liquid Labs*, 52 F.4th at 544.

95 *Bidi Vapor LLC*, 47 F.4th at 1203.

address an important aspect of the problem," the youth's access to the companies' products."[96] Above all else, the Eleventh Circuit determined that not reviewing these plans was not a harmless error because the companies designed them in compliance with the 2020 Guidance.[97] Likewise, the Fifth Circuit emphasized that in the agency's pre-MDO guidance to applicants, the FDA told "manufacturers to submit their marketing plans in mind-numbing detail[.]"[98] The Fifth Circuit furthered that reviews of marketing plans were a required and essential component for the FDA to make a full APPH determination on a product.[99] In the Fifth Circuit's perspective, the approval of an e-cigarette product should mirror that of a composite standardized test made up of two sections: (1) the evidentiary support; and (2) the marketing plan.[100] Under this perspective, a weaker showing of the benefits of a flavored e-cigarette versus a tobacco-flavored e-cigarette could be counterbalanced by a strong showing of an applicant's super restrictive marketing plan, all but guaranteeing no children would have access to the e-cigarette product.[101]

The Fifth Circuit's and Eleventh Circuit's decisions strongly regard the first element of the APPH, which requires weighing the potential impact on user and nonuser populations. The decision references the fact that "marketing and sales-access-restriction plans bear on the statutory requirement to consider the 'likelihood that those who do not use tobacco products will start using such products.'"[102] This coincides with the FDA's initial recommendation that applicants should provide marketing and sales-access restriction plans so the FDA can conclude a proper showing that permitting the sale of a product would be APPH.[103]

The FDA responded to the criticism, suggesting that it had already become an expert at reviewing marketing materials and, as a result, did not need to review any of the marketing plans to make a decision regarding an applicant's application.[104] The Fourth Circuit sided with

96 *Id*.

97 *Id.*

98 Wages & White Lion Invs. v. FDA, 90 F.4th 357, 364 (5th Cir. 2024)

99 *Id*. at 388.

100 *Id*.

101 *Id*.

102 Bidi Vapor LLC v. U.S FDA, 47 F.4th 1191, 1203 (11th Cir. 2022) (citing 21 U.S.C. § 387j(c)(4)).

103 2019 Guidance, *supra* note 11, at 50.

104 *Bidi Vapor LLC*, 47 F.4th at 1204 (quoting the Agency's brief which stated that its "extensive experience with sales[-]access and marketing restrictions" allowed it to determine that "[the companies'] proposed advertising and sales[-]access restrictions would not tip the balance between adult benefits and youth risks.")

the FDA, agreeing that a review of an applicant's marketing plans was only necessary *if* the applicant had provided sufficient scientific evidence that their product was APPH.[105] Additionally, the Fourth Circuit attempted to distinguish the case before it from the Eleventh Circuit because the plaintiffs in its case had not presented "novel marketing plans," in contrast to the plaintiffs in the Eleventh Circuit case.[106] The dissent in *Bidi Vapor* found the FDA's reasoning persuasive and chided the applicants for not providing evidence that flavored e-cigarettes offer a clear advantage over tobacco-flavored vaping products in decreasing adult use of combustible cigarettes.[107] Likewise, in the Sixth Circuit, the FDA argued that reviewing applicant's marketing plans was irrelevant to its analysis because the FDA knew that applicants' marketing plans would not alter its decision.[108] According to the FDA, the applicants' marketing plans could not overcome its insufficient evidence proving flavored e-cigarettes were more effective than tobacco-flavored e-cigarettes.[109]

Other courts acknowledged that the FDA's limited review of marketing plans was suspect but did not warrant overturning the MDOs. The Sixth Circuit upheld the FDA's MDO to *Breeze Smoke, LLC*, but noted that the agency's review of the company's marketing plan was "possibly insufficient."[110] The court even noted that it was "unclear how the FDA could have known" whether "Breeze Smoke's marketing measures . . . would not have altered its analysis" because the FDA did not review the marketing measures.[111] In the Seventh Circuit, the appellant failed to raise the issue, thus, the court did not consider it and determined that the appellant had "waived this point" in future appeals.[112]

The split between the circuits boils down to whether it should be mandatory or in the department's discretion to consider an applicant's marketing plans during a PMTA review. The Third Circuit's, Fourth Circuit's, and Ninth Circuit's decision has a better impact in the short term, while the Fifth Circuit's and Eleventh Circuit's decision has a better impact in the long run. In the immediate, the Third Circuit's, Fourth Circuit's, and Ninth Circuit's decisions resulted in positive public

105 Avail Vapor, LLC v. U.S. FDA, 55 F.4th 409, 425 (4th Cir. 2022), *cert denied*, 144 S. Ct. 277 (2023).

106 *Id.* at 424.

107 *Bidi Vapor LLC*, 47 F.4th at 1209 (Rosenbaum, J., dissenting).

108 Breeze Smoke, LLC v. U.S. FDA, 18 F.4th 499, 508 (6th Cir. 2021).

109 *Id*.

110 *Id.*

111 *Id.*

112 Gripum, LLC v. U.S. FDA, 47 F.4th 553, 558 (7th Cir. 2022).

health considerations because they removed products that were being illegally sold from the market.[113] Yet, the Eleventh Circuit's decision requiring a review of marketing plans provided a better roadmap for the future of APPH interpretation. The Eleventh Circuit recognized that requiring the FDA to re-review the applicant's materials with actual consideration of the marketing plans will likely not change the outcome,[114] but changing the outcome is not the benefit of the requirement. From a knowledge production[115] perspective, the FDA can shape applicant's agendas to determine the most effective means for reducing youth sales. By making no determinations on novel marketing plans the FDA is inhibiting any innovation about how applicants and the agency can address the problem.

Likewise, mandating a review of marketing plans helps to shape our complicated understanding of what is required under APPH. Mandating review provides a clear example of the FDA conducting the balancing test under the statute. In review, the FDA would consider the weight of evidence supporting flavored e-cigarettes and the potential effectiveness of the marketing plans. Then, even if it finds the marketing plans insufficient, it would be required to expand its reasoning further. As noted previously, under the TCA, the FDA is not allowed to only consider the health of one subgroup; instead, it must consider the health of "the population as a whole, including users and nonusers of the tobacco product."[116] The FDA itself acknowledged in product applications that "the strategy that a firm uses to avoid marketing flavored ENDS products to those under 21 is a critical aspect of product regulation."[117] The agency also stated that "the applicant's marketing plans . . . will provide input that is critical to FDA's determination" of APPH.[118] The agency's rule "requires PMTAs to contain a discussion of several key high-level aspects of the applicant's plans to market the product" to assist the FDA in determining whether there is a showing of APPH.[119] Whether it intended to or not, the FDA's final rule

113 *See generally* 21 U.S.C. § 387j (stating that new tobacco products cannot be sold until they receive premarket approval); *accord* 2019 Guidance, *supra* note 11 (showing that any tobacco products that are currently being marketed and sold without a successful PMTA are illegally on the market)

114 Bidi Vapor LLC v. U.S FDA, 47 F.4th 1191, 1206 (11th Cir. 2022).

115 Svirsky et al., *supra* note 59.

116 21 U.S.C. § 387j(3).

117 Breeze Smoke, LLC v. U.S. FDA, 18 F.4th 499, 507 (6th Cir. 2021) (citation omitted).

118 Final Rule, *supra* note 29, at 55323.

119 Final Rule, *supra* note 29, at 5532329.

demonstrated that even the agency itself originally believed that marketing plans would be a fundamental component of PMTA reviews.

The FDA has also granted Marketing Granted Orders (MGOs) for tobacco-flavored e-cigarettes that offered the same marketing strategies as those denied by flavored e-cigarettes.[120] In the MGO for a Vuse e-cigarette, manufactured by R.J. Reynolds Vapor Company, the FDA seemed impressed by the company's plan to "[not] use testimonials by sports figures or celebrities," to not use persons looking twenty-five or younger in advertising materials, and to not use themes that would attract individuals twenty-one or younger.[121] Critics of the decision, however, have noted that for this to be a positive public health decision, the Vuse product would have to result in "smokers switch[ing] entirely or near-completely from smoking to using the Vuse e-cigarettes instead."[122] The FDA asserted it was comfortable with the solely tobacco-flavored products because high schoolers typically start using e-cigarettes through fruit-flavored e-cigarettes, even though Vuse was named by 10 percent of high school e-cigarette users as their go-to brand.[123]

While not challenged in court, there appears to be a discrepancy in approving a tobacco-flavored product on the basis that its marketing plans are adequate while not even reviewing the marketing plans of flavored e-cigarettes. Of course, the point here is not to say that the FDA should be approving flavored e-cigarettes. On the contrary, the point is that the FDA should have to elucidate what its marketing standards are for approving and prohibiting e-cigarettes. For example, the FDA decision never considers whether current youth e-cigarette users would switch to tobacco-flavored e-cigarettes if these products were easier to obtain than flavored e-cigarettes.[124]

The FDA's rules and enforcement are essential to creating effective e-cigarette regulation. Without clarifying its regulatory process and standards, the FDA runs the risk that its orders—whether in favor of a

120 Marketing Granted Orders, FDA *Marketing Granted Order to R.J. Reynolds Vapor Company for Vuse Solo Power Unit* (Oct. 12, 2021).

121 *Id.*

122 Katherine Ellen Foley, *Confusion Clouds FDA's Approach to E-Cigarettes,* POLITICO (Oct. 14, 2021, 4:00 PM), https://www.politico.com/news/2021/10/14/fda-approach-ecigarettes-516027.

123 Press Release, FDA, FDA Permits Marketing Of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

124 *Id.*

product or against a product—will be "legally challenged and overturned by the courts."[125] While the challenges have only come from companies that have had their products denied, the FDA runs the risk of being sued[126] by activist groups and medical organizations that believe the FDA made an APPH determination in error. Thus, requiring a review of market plans not only further increases fundamental industry knowledge of what methods are and are not effective, it also provides greater protection to the FDA in ensuring that its decisions are fully considered.

V. NAVIGATING THE FDA'S EVIDENTIARY STANDARDS FOR APPH

A. A Comparison of MDOs Issued for Flavored E-Cigarettes with MGOs Issued for Tobacco-Flavored E-Cigarettes

Other decisions have been useful in clarifying the FDA's interpretation of the APPH as it applies to flavored e-cigarettes. Early legal challenges to MDOs have centered on the principle that the FDA "pull[ed] a surprise switcheroo" by heightening the evidence requirement without giving fair notice.[127] The initial challenge under this principle was successful.[128] Challengers succeeded in arguing that although the FDA originally stated long-term studies were not required, the FDA had rejected their applications because the agency determined that it would "likely need evidence from long-term studies to grant a PMTA for flavored e-cigarettes."[129] Since the initial litigation, other circuits have been more deferential to the FDA's discretion of what types of evidence are required.[130] Courts have rejected the notion that the FDA surprised applicants by requiring heightened evidence for flavored e-cigarette products to be approved for market.[131] Instead, the evidentiary burden has always been to allow the FDA to make determinations as to whether a product complies with APPH.[132]

125 Svirsky et. al, *supra* note 5959.

126 *E.g.,* Am. Acad. of Pediatrics v. FDA, 399 F. Supp. 3d 479, 484 (4th Cir. 2019) (holding for the plaintiffs that the FDA was failing to live up to its statutory responsibility by not enforcing e-cigarette regulations).

127 Wages & White Lion Invs., L.L.C. v. U.S. FDA, 16 F.4th 1130, 1138 (5th Cir. 2021), *rev'd*, 41 F.4th 427 (5th Cir. 2022) (holding that the FDA had changed the evidentiary requirement for PMTAs for flavored e-cigarettes without providing fair notice).

128 *Id.*

129 *Id.* at 1135.

130 Gripum, LLC v. U.S. FDA, 47 F.4th 553, 558 (7th Cir. 2022).

131 *Id.*

132 *See* 21 U.S.C. § 387j(c).

To further examine this principle in practice, the following sections will analyze the FDA's discretion in reviewing the evidence of unsuccessful flavored e-cigarette applicants and successful tobacco-flavored e-cigarette applicants. The section weighs the evidence that the youth prefer flavored vapes against (1) evidence showing the effectiveness of products as a smoking cessation device and (2) evidence that a specific style of vape is better suited for the market than others.

3. Evidentiary Standard in Smoking Cessation Claims

As the FDA continues to roll out MGOs and MDOs, it is clear that flavored e-cigarettes have a higher evidentiary burden than tobacco-flavored e-cigarettes for claiming their product is an effective smoking cessation aid. This is because a flavored e-cigarette applicant cannot just show its product helps individuals stop smoking combustible cigarettes.[133] Rather, the flavored e-cigarette applicant must show that its products are better than its tobacco-flavored e-cigarette counterparts at reducing or switching over combustible cigarette users.[134] For example, in the FDA's MDO to Wages and White Lion Investments, the FDA emphasized that the company could not rely on cohort studies that emphasized the effectiveness of tobacco-flavored e-cigarettes as a means of smoking cessation.[135] Instead, the FDA expected the company to provide long-term studies that proved specifically "flavored e-cigarettes" had long-term smoking cessation benefits.[136]

The agency's "key basis" was the lack of "robust and reliable evidence from long-term studies, such as a 'randomized controlled trial, a longitudinal cohort study, or other evidence evaluating the impact of the new flavored vs. tobacco-flavored products on adult smokers' switching or cigarette reduction over time."[137] Thus, the FDA could not find that the company's product was APPH because the company could not show that flavored e-cigarettes were more effective than tobacco-flavored ones.

To the ire of flavored e-cigarette products, courts do not require the FDA to take a bright-line approach on evidentiary standards. This is because courts interpreted the TCA as *not* requiring the FDA "to define

133 *See* Prohibition Juice Co. v. U.S. FDA, 45 F.4th 8, 14 (D.C. Cir. 2022) (stating that the FDA made it clear that flavored e-cigarettes had heightened evidentiary standards to prove how their products compare to tobacco-flavored e-cigarettes).

134 *Id.*

135 Wages & White Lion Invs., L.L.C. v. U.S. FDA, 16 F.4th 1130, 1138 (5th Cir. 2021), *rev'd*, 41 F.4th 427 (5th Cir. 2022).

136 *Id.* at 1141.

137 *Id.* at 1134.

threshold levels of likelihoods or the minimum number of users who must be aided for a product to pass muster."[138] For example, in *Prohibition Juice Co. v. United States FDA*, the D.C. Circuit did not require the FDA to explicitly state the threshold of evidence that would guarantee the company product approval, only that the FDA has shown flavored e-cigarette applicants must submit "rigorous 'valid scientific evidence[.]'"[139] Thus, a bright-line approach is not statutorily nor judicially required.

Perhaps, however, a bright-line approach would be beneficial to the FDA, applicants, and the public in fully comprehending the FDA's decision-making. While the courts seem to agree with the heightened standard for flavored e-cigarette applicants, there is some confusion as to how the evidentiary standard should apply to tobacco-flavored e-cigarettes.[140] For example, the FDA received criticism for granting its first Marketing Granted Order (MGO) to Vuse, an e-cigarette brand owned by tobacco giant R.J. Reynolds.[141] In its decision, the FDA cited the company's statistics, which suggested 1.5% of current combustible cigarette users will transition exclusively to e-cigarette use.[142] The FDA also acknowledged that "10 percent of high school students who currently used e-cigarettes named Vuse as their usual brand."[143] These numbers suggest a discrepancy between the potential of the product to be an effective smoking cessation tool and the inherent risk Vuse poses in encouraging young people to begin vaping. The agency justified its MGO by noting that "young people are less likely to start using tobacco-flavored ENDS products and then switch to higher-risk products, such as combustible cigarettes."[144] Additionally, it cited Vuse's statistic that

138 Gripum, LLC v. U.S. FDA, 47 F.4th 553, 558 (7th Cir. 2022).

139 Prohibition Juice Co. v. U.S. FDA, 45 F.4th 8, 21 (D.C. Cir. 2022).

140 *See* Foley, *supra* note 122.

141 Press Release, FDA, FDA Permits Marketing Of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency, (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

142 U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS (Oct. 12, 2021), https://www.fda.gov/media/153017/download.

143 *See* Foley, *supra* note 122*;* Bryan Piestch, *FDA Permits E-Cigarette for First Time, R.J. Reynold's Vuse*, WASH. POST (Oct. 13, 2021, 4:01 AM), https://www.washingtonpost.com/health/2021/10/13/fda-authorization-ecigarettes-vuse/ (stating that Vuse is the second most popular brand amongst high school students).

144 Press Release, FDA, FDA Permits Marketing Of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency, (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

"80 [percent] of youth aged 12-17" use a flavored e-cigarette for their first-time vaping.[145] Stated in the alternate, this means 20 percent of high school students vaping for the first time used tobacco-flavored e-cigarettes.

On May 12, 2022, the FDA issued three additional MGOs for Vuse products.[146] The FDA acknowledges in its approval that Vuse's model likely "overestimates the population health benefit" that its tobacco e-cigarettes will have.[147] Additionally, the agency acknowledged that traditional alternative nicotine treatments, such as nicotine gums or patches, were more effective and had less potential for abuse than Vuse's tobacco-flavored e-cigarette products.[148] Yet, the agency still made a determination of APPH and granted marketing.

In contrast, the FDA determined all of Vuse's flavored e-cigarette applications were not APPH.[149] While the flavored products under review were presented with identical evidence regarding their effectiveness in reducing adult smoking, the agency prioritized the risk the flavored e-cigarettes had to young persons.[150] The agency did not delineate at what point, if any, Vuse's flavored e-cigarettes would be viable for market. What this emphasizes to all applicants and the public is a heightened evidentiary burden for flavored e-cigarettes that does not exist for tobacco-flavored e-cigarettes. The FDA, in its decision, referenced the need to balance under the APPH the benefits to smokers with the potential risks to non-smoker populations.[151]

Proponents of flavored e-cigarettes took an even greater hit when the FDA announced it was issuing MDOs to a variety of menthol-flavored e-cigarettes. The FDA, in its guidance, had indicated that menthol was closer categorically to tobacco-flavored cigarettes than to other flavored

145 U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS (Oct. 12, 2021), https://www.fda.gov/media/153017/download.

146 FDA, *Premarket Tobacco Marketing Granted Orders* (Jan. 9, 2024), https://www.fda.gov/tobacco-products/premarket-tobacco-product-applications/premarket-tobacco-product-marketing-granted-orders (last visited February 10, 2023).

147 U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS (May 12, 2022), https://www.fda.gov/media/165236/download.

148 *Id.*

149 Press Release, FDA, FDA Permits Marketing Of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency, (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

150 *Id.*

151 *Id.*

cigarettes because younger populations did not typically use menthol.[152] Additionally, some proponents have shown that menthol-flavored e-cigarettes are more effective at reducing adult consumption of combustible cigarettes than tobacco-flavored e-cigarettes.[153] Initially, the Office of Science at the Center for Tobacco Products[154] had determined that menthol would likely be APPH.[155] Memos also show that there was disagreement in how departments in the FDA wanted to evaluate the scientific evidence of menthol-flavored e-cigarettes.[156] These discussions ultimately led to a reversal of any approval of menthol e-cigarettes, and, instead, the FDA categorized menthol e-cigarettes with other flavored e-cigarettes and subjected the products to the higher standard of evidence.[157]

Thus, where flavored e-cigarette applicants continue to take issue with the FDA is in the agency's approach to reviewing evidence. In the menthol case files, it appears the evidence is on a shifting scale as those inside the department struggle to determine the proper standard of review.[158] Even though menthol combustible cigarettes are one of the most used cigarettes,[159] the agency has not linked the correlation between combustible cigarette flavor and e-cigarette flavor in assisting quitting as it has with tobacco-flavored products.

Additional leaked agency documents showed that the FDA began "bundling applications" and developed a "fatal flaw approach" to

152 2020 Guidance, *supra* note 12.

153 *See* Monica Webb Hooper & Sabrina L. Smiley, *Comparison of E-Cigarette Use Among Menthol and Non-Menthol Smokers: Findings from a Community Based Sample*, NAT. LIB. OF MED. (July 12, 2018), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6051503/.

154 *Center for Tobacco Products Organization Chart*, FDA, https://www.fda.gov/about-fda/fda-organization-charts/center-tobacco-products-organization-chart.

155 Memorandum to File from the Office of Science in the Center for Tobacco Products, Benjamin Apelberg, Deputy Director, https://www.scribd.com/document/614639508/Logic-Tech-Supplemental-Authorities-Logic-Technology-Development-LLC-v-U-S-Food-Drug-Administration#.

156 *Id.*

157 *Id.*

158 *Id.*

159 *See* Mitch Zeller, *FDA on Track to Take Actions to Address Tobacco-Related Health Disparities*, FDA (Jan. 27, 2022), https://www.fda.gov/news-events/fda-voices/fda-track-take-actions-address-tobacco-related-health-disparities (finding that 80 percent of all Black and Hispanic smokers and 35 percent of white smokers use menthol cigarettes).

expedite PMTA review.[160] The fatal flaw approach centered on not determining the merits of evidence but rather on determining whether specific types of evidence were absent.[161] The approach ran counter to the FDA's final rule, which stated it would not "set static requirements that a new tobacco product must meet" and it would not "assign weight to different types of evidence."[162] As such, the evidentiary burden for flavored e-cigarette products is heightened to the extent that the agency need not even conduct a full review of the merits of the applicants' evidence.

As a market regulator, it is within the FDA's interest to promulgate rules that "reduce combustible tobacco use, [make] combustible products less appealing while simultaneously making e-cigarette products safer."[163] In failing to set clear evidentiary standards or refusing to define what applicants must show, while simultaneously approving tobacco-flavored products (which are still used by the youth), the FDA is leaving itself open to further court challenges to its application of the APPH.[164] It is in the interest of the public, applicants, and the FDA for the agency to clearly define what evidence is necessary and what evidence proved previously successful so that all parties are properly informed in their expectations.

2. Evidentiary Standard in Different E-cigarette Styles

Another legitimate question brought forth by the approval of the Vuse products is which styles of e-cigarettes the FDA is granting for market approval. The "Vuse Solo Power Unit" is defined as a "closed e-cigarette system" with "replacement cartridges."[165] A closed e-cigarette system with cartridges is one that can be recharged but cannot be

160 Alex Norcia, *The FDA's Early Plan to Expedite Open-System Vape Marketing Applications*, FILTER MAGAZINE (Aug. 20, 2022), https://filtermag.org/fda-open-vape-plan/.

161 Alex Norcia, *FDA Memos Reveal its "Fatal Flaw" Rejection Plan for Flavored Vapes*, FILTER MAGAZINE (NOV. 3, 2021), https://filtermag.org/fda-memos-flavored-vapes/.

162 Final Rule, *supra* note 29, at 55335, 55384.

163 Svirsky et al., *supra* note 59.

164 Eric Lindblom, *The Tobacco Control Act's PMTA & MRTP Provisions Mean to Protect the USA From Any New Tobacco Products That Will Not Reduce Health Harms—But FDA Isn't Cooperating*, J. OF HEALTH CARE L. & POL'Y (2019) (noting that successful legal challenges could rise from Tobacco companies who litigate orders given to them or permissive orders given to competitors.)

165 Press Release, FDA, FDA Permits Marketing of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency (Oct. 12, 2021), https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency.

refilled by an individual without using a premanufactured cartridge (a small pod full of e-liquid).[166] This is the same style of system used by the most notorious e-cigarette manufacturer, JUUL.[167] The FDA acknowledged this in its approval of Vuse's product and noted that the "sleek design, ability to use products discreetly, and user-friendly nature make pod . . . products appealing among youth."[168] Ultimately, the FDA decided that "more data is needed to determine" whether approving specific styles of tobacco-flavored e-cigarettes would have any impact on youth use.[169] Thus, in making an APPH determination, the FDA gave limited consideration to e-cigarette style.

Likewise, the FDA also approved a disposable, single-use, closed-system tobacco-flavored e-cigarette manufactured by NJOY.[170] The single-use disposable system is the same style as the most popular brand amongst youth, Puff Bar.[171] In its approval of a disposable e-cigarette, the FDA noted that the percentage of high schoolers who use e-cigarette products that prefer disposable vapes has increased from 2.4 percent to 26.5 percent.[172] The agency determined that the variability in device types indicates that there are preferences among individuals in what device type to use.[173] Yet, the more consistent indicator was use of flavor vs tobacco flavored.[174]

As such, the agency's decisions seem to reflect that for flavored e-cigarettes at this stage, the type of device (closed or opened) is irrelevant.[175] Proponents of consideration of systems emphasize that

166 Robert McMillian et al., *Adolescent Use of Different E-Cigarette Products*, 142 PEDIATRICS 1 (2018) [https://doi.org/10.1542/peds.2018-0260].

167 JUUL, *About Juul,* https://www.juul.com/learn/device (last visited Nov. 13, 2022).

168 U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS (Oct. 12, 2021), https://www.fda.gov/media/153017/download.

169 *Id.*

170 Press Release, FDA, *FDA Issues Marketing Decisions on NJOY Daily E-Cigarette Products* (June 10, 2022), https://www.fda.gov/tobacco-products/ctp-newsroom/fda-issues-marketing-decisions-njoy-daily-e-cigarette-products.

171 Eunice Park-Lee et al., *Notes From the Field: E-Cigarette Use Among Middle and High School Students - National Youth Tobacco Survey, United States 2021*, CTR. FOR DISEASE CONTROL (Oct. 21, 2022), https://www.cdc.gov/mmwr/volumes/70/wr/mm7039a4.htm?s_cid=mm7039a4_w#suggestedcitation (finding that 26 percent of students report using Puff Bar as their first choice vape).

172 U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS, at 21 (April 24, 2022), https://www.fda.gov/media/164458/download.

173 *Id.*

174 *Id.*

175 *See* Wages & White Lion Invs., L.L.C. v. U.S. FDA, 16 F.4th 1130 (5th Cir. 2021), *rev'd*, 41 F.4th 427, 437 (5th Cir. 2022).

open systems are far more common among adults than among middle and high schoolers.[176] The FDA's own guidelines emphasized that it would prioritize countering the promulgation of closed-vape systems while expediting open-vape systems.[177] Yet, the agency's approval of closed-vape systems (the disposable and pod systems described above) contradicts this objective. In court challenges, the FDA has defended that once enforcement begins to crack down on one form of e-cigarette, the youth "migrate" to other forms.[178] Notably, the statistic that the FDA cited to support this reasoning was the youth transitioning from pod-based closed systems to disposable closed systems.[179]

In considering this, the FDA should reflect on its final rule statement that there is no bright-line rule about the system or evidence required.[180] The FDA is demonstrating that it provides greater weight to specific types of evidence. From a knowledge purveyor perspective,[181] the FDA's ability to accurately distill information for the public is a fundamental component of the regulations. The FDA may need to consider a deeper review of the device type to create better public knowledge as to whether the difference between opened and closed systems can be fundamental in decision-making. Emphasizing in its rule what types of evidence it does prioritize and how the style of e-cigarette is not a prominent factor would also help to limit legal challenges that argue the FDA is not providing individual review.[182] In particular, the FDA should give closer consideration as to whether only approving open style would be more APPH. To provide greater clarity for the public and applicants and to provide protection for itself, the FDA should clarify its rules to emphasize what forms of evidence it is

176 *See* Caroline Chen, Yue-Lin Zhuang & Shu-Hong Zhu, *E-Cigarette Design Preference and Smoking Cessation*, 51 AM. J. PREVENTIVE MED. 356, 357 (2016) ("[A]n overwhelming proportion of e-cigarette users preferred open systems.") [https://doi.org/10.1016/j.amepre.2016.02.002].

177 2020 Guidance, *supra* note 12.

178 *See Wages & White Lion Invs., L.L.C.*, 41 F.4th at 437.

179 *See id.* ("When FDA changed its enforcement policy to prioritize pod-based flavored ENDs . . . we subsequently observed a substantial rise in use of disposable flavored ENDS—a ten-fold increase (from 2.4 percent to 26.5 percent)) (citation omitted).

180 Final Rule, *supra* note 29.

181 Svirsky et. al, *supra* note 59.

182 *See generally Wages & White Lion Invs.*, L.L.C., 41 F.4th at 445–46 (Jones, J., dissenting) (stating that the FDA's fatal flaw approach ran counter the what the FDA was asserting to applicants would be relevant for review).

182 Final Rule, *supra* note 29, at 55335, 55384.

providing greater weight to (i.e., providing greater weight to evidence of youth dangers compared to adult benefits).

B. Path Forward for Flavored E-Cigarette Regulation

As applicants continue to spend money preparing their products for market, they must face the reality that there may be no place for flavored e-cigarettes on the market. As it stands now, the FDA's enforcement indicates there is no place for flavored e-cigarettes. Likewise, California has joined the fray to prohibit the sale of flavored e-cigarette products.[183] Senators on both sides of the aisle have urged for the FDA to outright ban flavored e-cigarette products, as Senate Majority Whip Dick Durbin has sent multiple letters to the FDA urging them to take swifter action against e-cigarette manufacturers.[184] While the FDA has not issued an outright ban on flavored e-cigarettes, their MDOs,[185] the backing of the courts,[186] and the public support[187] against flavored e-cigarettes seem to be leading all roads there. It is likely not

183 Yuki Noguchi, *Proposition 31 Passes in California: Flavored Tobacco Will Be Banned*, NPR (Nov. 10, 2022), https://www.npr.org/2022/11/10/1135718993/proposition-31-passes-in-california-flavored-tobacco-will-be-banned.

184 *Id.*; Press Release, Dick Durbin, *Durbin, Senators To FDA Commissioner: Remove All Unauthorized E-Cigarettes from Market Immediately* (May 20, 2022), https://www.durbin.senate.gov/newsroom/press-releases/durbin-senators-to-fda-commissioner-remove-all-unauthorized-e-cigarettes-from-market-immediately; Press Release, Dick Durbin, *Durbin, Senators to FDA Commissioner: Agency is Six Months Past Court-Ordered Deadline to Regulate E-Cigarettes* (Mar. 9, 2022), https://www.durbin.senate.gov/newsroom/press-releases/durbin-senators-to-fda-commissioner-agency-is-six-months-past-court-ordered-deadline-to-regulate-e-cigarettes.

185 Press Release, FDA, *FDA Denies Marketing Applications for About 55,000 Flavored E-Cigarette Products for Failing to Provide Evidence They Appropriately Protect Public Health* (Aug. 26, 2021), https://www.fda.gov/news-events/press-announcements/fda-denies-marketing-applications-about-55000-flavored-e-cigarette-products-failing-provide-evidence?utm_source=CTPTwitter&utm_medium=social&utm_campaign=ctp-pmtadeadline.

186 Breeze Smoke, LLC v. U.S. FDA, 18 F.4th 499, 508 (6th Cir. 2021) (finding that there is substantial evidence that flavored e-cigarettes hold a heightened public health risk); Prohibition Juice Co. v. U.S. FDA, 45 F.4th 8, 26 (D.C. Cir. 2022) (holding material distinctions in style of vape is irrelevant due to the disproportionate risk flavored vapes of any kind.)

187 Press Release, Dick Durbin, Senate Majority Whip, *Durbin Investigation Finds More than 750,000 Kids Have Picked Up Vaping Since FDA's Missed Deadline to Regulate E-Cigarettes* (June 22, 2022), https://www.durbin.senate.gov/newsroom/press-releases/durbin-investigation-finds-more-than-750000-kids-have-picked-up-vaping-since-fdas-missed-deadline-to-regulate-e-cigarettes#:~:text=Durbin%20underscores%20both%20that%20youth,leaving%20our%20kids%20at%20risk.

in the FDA's interest to propose an outright ban on flavored e-cigarette products, as a similar ban in California has already led to litigation by manufacturers.[188] Instead, the FDA must continue to develop and shape the framework of APPH in a way that provides a difficult but well-defined path forward for applicants.

The FDA can do so in many ways. First, regarding the evidentiary standards, it can clarify what showings tobacco-flavored applicants had that emphasized their products would not be utilized by children. In press releases where the FDA announced tobacco-flavored e-cigarettes were being granted MGOs, the FDA cited its own statistics that 10 percent of youth e-cigarette users use tobacco-flavored products.[189] To put it in perspective, even if "only" 10 percent of the youth use tobacco e-cigarettes, that still accounts for an estimated 255,000 children.[190] The new numbers even show that Vuse's popularity amongst youth vapers increased since the FDA approved its tobacco products for market.[191] Yet in the executive summaries the FDA provides for MGOs, the agency provides only vague understandings of why particular tobacco-flavored e-cigarettes will not attract the youth.[192] In the approval of NJOY DAILY EXTRA Rich Tobacco 6 percent, the FDA stated, "existing evidence consistently indicates that use of tobacco-flavored ENDS is less common compared to flavored ENDS among youth."[193] And in weighing how the product would help adult users of combustible cigarettes, the agency simply stated, "the applicant has demonstrated

188 Robin Foster, *California Voters Ban Flavored Tobacco, and a Cigarette Maker is Suing*, U.S. NEWS (Nov. 11, 2022).

189 *See* Marketing Granted Orders, FDA, *Marketing Granted Order to R.J. Reynolds Vapor Company for Vuse Solo Power Unit* (Oct. 12, 2021); News Release, FDA, *Youth E-Cigarette Use Remains Serious Public Health Concern Amid Covid-19 Pandemic* (Sept. 30, 2021), https://www.fda.gov/news-events/press-announcements/youth-e-cigarette-use-remains-serious-public-health-concern-amid-covid-19-pandemic (citing statistics that 85 percent of youth vapers use flavored e-cigarettes while 15 percent either use tobacco-flavored or are unsure what flavor).

190 Press Release, CDC, *More Than 2.5 Million Youth Reported E-Cigarette Use in 2022* (Oct. 6, 2022), https://www.cdc.gov/media/releases/2022/p1007-e-cigarette-use.html.

191 *Compare* Press Release, FDA, *FDA Permits Marketing of E-Cigarette Products* (Oct. 12, 2021) (citing statistic that 10 percent of youth vapers site Vuse as their primary brand), *with* Press Release, CDC, *More Than 2.5 Million Youth Reported E-Cigarette Use in 2022* (Oct. 6, 2022), https://www.cdc.gov/media/releases/2022/p1007-e-cigarette-use.html (showing that 12.5 percent of students surveyed named Vuse as their go-to brand).

192 *See* U.S. FOOD & DRUG ADMIN., TECHNICAL PROJECT LEAD REVIEW OF PMTAS (June 10, 2022).

193 *Id.*

that *some* current adult smokers are interested in the new products to assist in decreasing or quitting their cigarette use."[194]

For applicants hoping to get their products approved or for the public curious as to the FDA's decision-making, these statements provide little insight into the agency's thinking. Certainly, in its role as a knowledge producer,[195] the agency is making it known to the public and Congress that it should view tobacco-flavored e-cigarettes as a viable alternative for adult smokers while flavored e-cigarettes are a detriment to youth health. But if there is ever going to be a path forward for flavored e-cigarette producers, the FDA needs to define its standard better. For example, the FDA should determine whether it is good enough evidence that *only* 10 percent of youth vapers use tobacco-flavored e-cigarettes. Similarly, the FDA should continue determining whether the device type manufactured matters, as some companies have had applications denied even if the style of e-cigarette is among the least popular among young populations.[196]

To provide greater clarity for what applicants can expect, the FDA should consider releasing statistical averages of what MDOs and MGOs showed to give expectations of what a proper showing of APPH looks like and does not look like statistically. While the FDA should not feel pressured to approve specific products simply because a company spends a lot of money on applications, it serves the interests of the public, applicants, and the agency to have fair, clear standards. Ultimately, public health considerations are the most important. But if there are ways for the FDA to reduce youth access to flavored products while being able to approve the products that existing adult users are shown to be most interested in, it would be within the agency's interest to do so.

IV. CONCLUSION

Through its struggle to implement e-cigarette regulations since 2010, the FDA was forced to quickly recoup to set the market straight. In its delay, it allowed the market to target and expose adolescents to nicotine, resulting in the existing public health crisis of one in seven high

194 *Id.* (emphasis added).

195 Svirsky et al, *supra* note 59.

196 *See generally* CDC, *Notes From the Field: E-Cigarette Use Among Middle and High School Students - National Youth Tobacco Survey, United States, 2021* (Oct. 1, 2021) (finding that the youth prefer closed systems because they are easier to obtain and easier to conceal).

schoolers vaping.[197] As it continues to face pressure from manufacturers, legislatures, and public health advocates, the FDA must work to refine its application of APPH.

In particular, the FDA can seek to smooth the process on two fronts. First, it can ensure it reviews the marketing and sales-access restriction plans of all applicants to some degree. Blanket rejections with no review process of sales strategies have left the FDA target to lawsuits and runs counter to its final rule.[198] Additionally, failing to do so limits the public understanding of how the FDA is interpreting market regulations. As marketing review plans apply to both flavored and tobacco-flavored e-cigarettes, it is in the interests of all parties for the FDA to provide clear expectations of what a marketing plan needs to include. Additionally, it will help to refine and develop potential new strategies that both flavored and tobacco-flavored manufacturers can deploy to continue decreasing youth access and exposure to e-cigarettes.

Moreover, the FDA can also continue to refine its evidentiary standard and what it expects a showing of APPH to entail. By providing further transparency of its decision-making in both MDOs and MGOs, the FDA can further insulate itself from litigation while increasing public confidence in its decision-making. Likewise, in its role as a knowledge producer, it is important for the FDA to continue to curate the public's understanding of what risks in public health policy are acceptable or unacceptable. Through clarity will come confidence.

197 Cara Murez, *1 in 7 U.S. High School Students Now Vapes*, U.S. NEWS (Oct. 6, 2022), https://www.healthday.com/health-news/child-health/b-10-6-emb-1pmet-1-in-7-u-s-high-school-students-now-vapes-2658403685.html

198 *See generally* Wages & White Lion Invs., L.L.C. v. U.S. FDA, 41 F.4th 427, 445 (5th Cir. 2022) (Jones, J., dissenting) (stating that the FDA's fatal flaw approach ran counter the what the FDA was asserting to applicants would be relevant for review); Final Rule, *supra* note 29, at 55335-55384.