Case No.: 24-60304

IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

Breeze Smoke, L.L.C.; Texas Wholesale,

Petitioners,

v.

Food & Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services; Marty Makary, Commissioner, U.S. Food & Drug Administration,

Respondents.

consolidated with

No. 24-60332

Vertigo Vapor, L.L.C., doing business as Baton Vapor; Max & Zach's Vapor Shops Incorporated,

Petitioners,

v.

Food & Drug Administration; Marty Makary, Commissioner, U.S. Food and Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services,

Respondents.

consolidated with

No. 24-60424

Lead by Sales, L.L.C., doing business as White Cloud Cigarettes; JP-MAXX, L.L.C., doing business as Jail Puff Max,

Petitioners,

v.

Food & Drug Administration; Marty Makary, Commissioner, U.S. Food and Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services,

Respondents.

consolidated with

No. 24-60628

Vapermate, L.L.C.; Vape Away, L.L.C.,

Petitioners,

v.

Food & Drug Administration; Marty Makary, Commissioner, U.S. Food and Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services,

Respondents.

consolidated with

No. 24-60098

Elite Brothers, L.L.C.; Clouds Vapors, L.L.C.,

Petitioners,

v.

U.S. Food & Drug Administration; Marty Makary, Commissioner, U.S. Food and Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services,

Respondents.

consolidated with

No. 24-60369

American Vapor Company, L.L.C.,

Petitioners,

v.

Food & Drug Administration; Marty Makary, Commissioner, U.S. Food and Drug Administration; United States Department of Health and Human Services; Robert F. Kennedy, Jr., Secretary, U.S. Department of Health and Human Services,

Respondents.

On Review Of FDA Marketing Denial Order
Issued Under The Federal Tobacco Control Act

PETITIONERS' CONSOLIDATED OPENING BRIEF

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CERTIFICATE OF INTERESTED PERSONS

No. 24-60304; Breeze Smoke, LLC, et al. v. FDA, et al.

The undersigned counsel of record certifies the following listed persons and entities as described in the fourth sentence of Rule 28.2.1 have an interest in the outcome of this case. These representations are made in order that the judges of this court may evaluate possible disqualification or recusal.

1. American Vapor Company LLC (Petitioner)
2. Breeze Smoke, LLC (Petitioner)
3. Clouds Vapors LLC (Petitioner)
4. Elite Brothers, LLC (Petitioner)
5. Max & Zach's Vapor Shops Inc. (Petitioner)
6. Lead by Sales, LLC d/b/a White Cloud Cigarettes (Petitioner)
7. JP-MAXX, LLC d/b/a Jail Puff Max (Petitioner)
8. Vapermate, LLC (Petitioner)
9. Vape Away, LLC (Petitioner)
10. Vertigo Vapor, Inc. d/b/a Baton Vapor (Petitioner)
11. Texas Wholesale (Petitioner)
12. Eric P. Gotting (counsel for Petitioners)
13. Azim Chowdhury (counsel for Petitioners)
14. U.S. Food and Drug Administration (Respondent)

15. U.S. Department of Health and Human Services (Respondent)
16. Hon. Pamela Bondi (U.S. Attorney General)
17. Robert F. Kennedy, Jr. (Respondent; HHS Secretary)
18. Robert Foster (Acting HHS General Counsel)
19. Martin A. Makary (Respondent; FDA Commissioner)
20. Dr. Bret Koplow (Acting Director, FDA Center for Tobacco Products)
21. Wendy S. Vicente (FDA Deputy Chief Counsel for Litigation)
22. Joshua Koppel (Counsel for Respondents)
23. Kevin Soter (Counsel for Respondents)
24. Benjamin Lewis (Counsel for Respondents)

Petitioners do not have any parent corporation or any publicly held corporation owning 10% or more of their stock.

/s Eric P. Gotting
Counsel for Petitioners

STATEMENT REGARDING ORAL ARGUMENT

Consolidated Petitioners request oral argument in this matter. This appeal raises important legal questions under the federal Family Smoking Prevention and Tobacco Control Act ("TCA") and Administrative Procedure Act ("APA"), and in particular Respondent U.S. Food and Drug Administration's ("FDA") denial of marketing authority for Petitioners' non-tobacco flavored Electronic Nicotine Delivery System ("ENDS") products. This consolidated matter also involves six administrative records containing extensive scientific and technical data submitted to FDA by Petitioners in support of their requests for marketing authorization through Premarket Tobacco Product Applications ("PMTA"). Finally, many of the issues raised in this consolidated matter implicate prior decisions issued by this Court, including *R.J. Reynolds Vapor Co. v. FDA*, 65 F.4th 182 (5th Cir. 2023) and *Wages and White Lion Invs., LLC v. FDA*, 90 F.4th 357 (5th Cir. 2024) (*en banc*). Therefore, Petitioners believe oral argument will assist the Court in understanding and resolving the factual and legal issues raised on appeal.

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JURISDICTIONAL STATEMENT

This Court has jurisdiction under Section 912, 21 U.S.C. §387*l*(a), of the Family Smoking Prevention and Tobacco Control Act ("TCA") to review the U.S. Food and Drug Administration's ("FDA") marketing denial orders ("MDO") issued to the consolidated Petitioner manufacturers (collectively "Petitioners").[1] The MDOs denied marketing authorization sought by Petitioners in Premarket Tobacco Product Applications ("PMTA") filed under Section 910, 21 U.S.C. §387j, of the TCA for various Electronic Nicotine Delivery System ("ENDS") products. The MDOs fully and finally decided Petitioners' PMTAs at the administrative level. 21 U.S.C. §§387j, 387*l*. Petitioners filed timely Petitions for Review with this Court pursuant to the 30-day deadline under 21 U.S.C. §387*l*(a).[2]

Venue is proper in this circuit as consolidated Petitioner retailers and Petitioner manufacturer American Vapor Company are located in this Circuit. *FDA v. R.J. Reynolds Vapor Co.*, 145 S. Ct. 1984, 1995 (2025) ("*RJR II*") (finding venue proper under the TCA where retailers have principal places of business in this

[1] Petitioner Breeze Smoke filed an opening merits brief on September 3, 2024. No. 24-60304; Doc. 27. Unless otherwise specified in this brief, the term "Petitioners" refers to the other five manufacturers who filed Petitions for Review in these consolidated cases. Respondents will address Breeze Smoke's opening brief in the consolidated response. *See* Joint Mot., No. 24-60304; Doc. 58 (July 14, 2025).

[2] *See* Breeze Smoke (24-60304; Doc. 1); Vertigo (24-60332; Doc. 1); Lead by Sales (24-60424; Doc. 1); Vapermate (24-60628; Doc. 1); Elite Brothers (25-60098; Doc. 1); American Vapor Company (25-60369; Doc. 1).

Circuit).[3] [4] *See also Global Van Lines, Inc. v. ICC*, 691 F.2d 773, 744 n.1 (5th Cir. 1982) (holding only one petitioner need establish venue under the similarly worded Hobbs Act at 28 U.S.C. §2343).

STATEMENT OF THE ISSUES

Consolidated Petitioners filed extensive Premarket Tobacco Product Applications ("PMTA") with Respondent U.S. Food and Drug Administration ("FDA") pursuant to the Family Smoking Prevention and Tobacco Control Act ("TCA") seeking FDA's authorization to market and sell various non-tobacco flavored (e.g., menthol, fruit) Electronic Nicotine Delivery System ("ENDS") products (i.e., electronic cigarettes). FDA denied the PMTAs before it began a full scientific review of the applications because the PMTAs did not: (i) contain a specific type of study—a randomized controlled trial ("RCT"), a longitudinal cohort study, or a similar study (referred to herein as a "comparative efficacy study")—showing Petitioners' non-tobacco-flavored ENDS are more effective than a comparator tobacco-flavored ENDS in helping adult smokers switch away from

[3] *See* Texas Wholesale (24-60304; Doc. 1); Max & Zach's Vapor Shops (24-60332; Doc. 1); JP-MAXX (24-60424; Doc. 1); Vape Away (24-60628; Doc. 1); Clouds Vapors (25-60098; Doc. 1); American Vapor Company (25-60369; Doc. 1).

[4] Attached to the Appendix are declarations from each Petitioner retailer establishing standing. *RJR II*, 145 S. Ct. at 1993; *see* ADD001-14.

traditional cigarettes; and (ii) propose what FDA referred to as "novel" measures to limit access to their ENDS products by minors.

This case raises the following issues:

1. Did FDA violate the TCA and act *ultra vires* when it only conducted a "targeted" review of the PMTAs and thus failed to perform a full scientific review to determine whether the ENDS products satisfy the TCA's "appropriate for the protection of the public health" ("APPH") standard?

2. Did FDA violate the TCA and Administrative Procedure Act ("APA"), and otherwise proceed in an arbitrary and capricious manner, when it denied Petitioners' PMTAs without considering and weighing extensive information in the applications demonstrating Petitioners' ENDS are APPH, including FDA's own national survey data showing minors are not using these products?

3. Did FDA act unlawfully by instituting a de facto restriction or ban on non-tobacco flavored ENDS, including menthol products, in violation of the TCA's and APA's notice and comment procedures?

4. Did FDA violate the APA and the Due Process Clause of the Fifth Amendment, and otherwise proceed in an arbitrary and capricious manner, when it failed to give Petitioners fair notice of its comparative efficacy approach or consider Petitioners' legitimate reliance interests in applying the standard to menthol-flavored ENDS products?

5. Did FDA's application of the comparative efficacy study requirement and the resulting de facto restrictions and/or ban on non-tobacco flavored ENDS run afoul of the Supreme Court's "major questions doctrine"?

6. Did FDA violate the APA and act in an arbitrary and capricious manner when it designated menthol-flavored ENDS products in PMTAs for two Petitioners as having a characterizing flavor other than menthol?

7. Did FDA violate the TCA and APA when it denied marketing authorization for two Petitioners' zero-nicotine products?

STATEMENT OF THE CASE

I. The Tobacco Control Act And FDA's Deeming Rule

In 2009, Congress enacted the TCA, amending the Food, Drug and Cosmetic Act ("FDCA"), to give FDA regulatory authority over the marketing and sale of "tobacco products." 21 U.S.C. §387, *et seq.* Six years later, on August 8, 2016, FDA's "Deeming Rule" went into effect, which applied the TCA to ENDS and other tobacco products that had not been initially regulated under the TCA. 21 U.S.C. §387a(a); 81 Fed. Reg. 28974 (May 10, 2016). At the time Petitioners filed their PMTAs in 2020 and 2021, the TCA defined "tobacco product" in relevant part to mean "any product made or derived from tobacco that is intended for human consumption…" 21 U.S.C. §321(rr) (2021).

Consequently, ENDS were immediately subject to numerous TCA provisions, including a requirement that ENDS manufacturers obtain premarket authorization from FDA before continuing to market and sell their products. 21 U.S.C. §387j. A manufacturer must submit a PMTA which entails a time-consuming and costly process of compiling extensive scientific, technical, and marketing data, all of which the TCA requires FDA to review when deciding whether a particular ENDS product meets the TCA's APPH standard. 21 U.S.C. §§387j(b), (c)(4).[5]

II. PMTA Deadlines And FDA Enforcement Discretion

Because the sudden application of the TCA's requirements to ENDS in 2016 would have abruptly forced thousands of existing products off the market, FDA established a series of deferred enforcement policies permitting existing ENDS to be sold until PMTAs were due. FDA said this approach balanced concerns regarding underage use while providing access to ENDS products adult smokers may be using to move away from more dangerous combustible cigarettes. 81 Fed. Reg. at 28977-78. A federal district court ultimately set a PMTA deadline of

[5] There are various types of ENDS products. "Open-system" devices do not come pre-filled with e-liquid; rather, the consumer must purchase bottled e-liquids and fill the device's open tank manually. "Closed-system" devices are pre-filled with e-liquid and are not re-fillable. They either involve the user inserting a pod or cartridge containing e-liquid into the device or a disposable device that comes pre-filled with e-liquid.

September 9, 2020, for manufacturers seeking continued enforcement discretion. *Am. Academy of Pediatrics, et al. v. FDA*, 8:18-cv-00883-PWG (D. Md.) (Dkt. Nos. 127 & 182). Any ENDS subject to a timely filed PMTA could remain on the market until September 9, 2021, after which the product, and any other product covered by a PMTA filed after the deadline, would be subject to FDA enforcement at the agency's discretion. *Id.*

III. The TCA's APPH Standard Requires FDA To Review And Weigh All Evidence In A PMTA And FDA's Possession

The TCA requires FDA to conduct a complex, science-based evaluation based on all contents in a PMTA and relevant evidence in FDA's possession to determine whether a product is APPH. Specifically, an MDO must be based on "information submitted to [FDA] as part of the application and *any other information before [FDA] with respect to such tobacco product*." 21 U.S.C. §387j(c)(2) (emphasis added). The TCA directs FDA to make that determination "with respect to the risks and benefits to the population as a whole, including users and nonusers of the tobacco product, and taking into account—(A) the increased or decreased likelihood that existing users of tobacco products will stop using such products [called "cessation"]; and (B) the increased or decreased likelihood that those who do not use tobacco products will start using such products [called "initiation"]." 21 U.S.C. §387j(c)(4).

Accordingly, FDA has repeatedly described APPH as an all-encompassing, multi-factored, multi-disciplinary standard. For instance, FDA noted in the final rule implementing the PMTA requirements that APPH involves a "complex determination," 86 Fed. Reg. 55300, 55335 (Oct. 5, 2021), that FDA "considers many factors," *id.* at 55314, and that FDA does not make a "determination on one static set of requirements," *id*. at 55385. FDA further declined "to assign weight to different types of evidence," *id.* at 55335, emphasizing APPH "requires a balancing" of risks and benefits, *id.* at 55384. FDA also refused "to create a series of criteria" that all products must meet for APPH, stated that an APPH "determination would involve consideration of many factors," and noted it "will be made with respect to…the population as a whole, rather than whether a product meets each item in a series of specific criteria." *Id.* at 55386. Significantly, FDA committed to determining APPH on an "individualized" basis, the "risks and benefits of a specific tobacco product," and "based on *all* of the contents of the application." *Id.* at 55320, 55390 (emphasis added).

During the rulemaking, FDA also rejected a comment demanding that an APPH evaluation focus on population segments most likely to be affected by ENDS and "require applicants to show a public health benefit for those specific groups." FDA concluded it does not require applicants to show a public health benefit for specific population segments. *Id* at 55385. Further, in response to

comments asking FDA to impose specific requirements on flavored tobacco products before issuing a marketing order, FDA again "declin[ed] to create a series of criteria that either all products or a specific subset of products must meet…to be considered APPH." *Id.* at 55386.

In June 2019, FDA also issued final PMTA guidance "intended to assist persons submitting" PMTAs which also discussed APPH.[6] FDA-003967. FDA said it "weighs all of the potential benefits and risks from information contained in the PMTA" to make an APPH determination. FDA-003978. And during October 2018[7] and October 2019 (FDA-004019) public meetings, FDA described a PMTA review as constituting a "multi-disciplinary" approach.[8]

Presented below is a 2019 FDA diagram depicting some of the many APPH factors FDA considers as part of a complete APPH analysis.[9]

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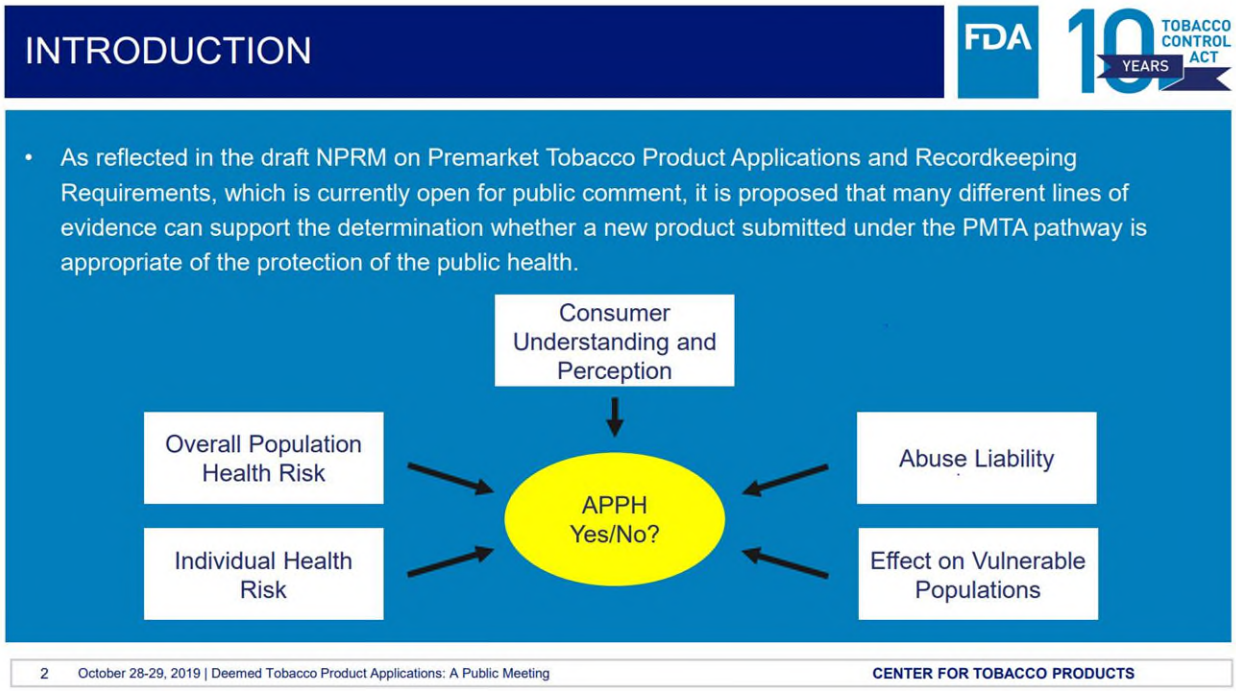
[6] For convenience's sake, when referencing the 2019 PMTA guidance, this brief only cites to the version appearing in the Vertigo administrative record. The records filed by FDA for Vapermate, Elite, and American Vapor also reference the 2019 version. The record for White Cloud does not include the 2019 guidance, but rather references a slightly updated 2023 version, which was issued after the MDOs in this case were filed. *See* https://tinyurl.com/2s3e6mad. The 2023 amendments are irrelevant to this consolidated brief.

[7] FDA, Tobacco Product Application Review Public Meeting, at 119 (Oct. 22, 2018), https://tinyurl.com/44a7mnbx.

[8] This brief only references the 2019 public meeting transcript as referenced in the Vertigo administrative record. The records for Vapermate, Elite, American Vapor, and White Cloud also include entries for the same transcript.

[9] *See* https://tinyurl.com/98jc36hc.



IV. FDA Must Consider PMTA Evidence Indicating That A Subject ENDS May Pose A Low Risk To Minors

Consistent with this holistic review process, FDA is obligated under the TCA to consider the positive impact underage restrictions on the marketing and sale of a product to minors could have on the APPH determination. 21 U.S.C. §387j(c)(1)(B) (providing a marketing granted order "may require that the sale and distribution of the tobacco product be restricted" and citing to 21 U.S.C. §387f(d) as permitting FDA to impose underage "access" and "advertising and promotion" restrictions to meet the APPH standard).

Indeed, before Petitioners filed their MDOs, FDA explicitly told them that marketing plans were key to obtaining an APPH finding. In its September 2019 proposed PMTA rule, FDA stated marketing plans would be "critical." 84 Fed.

Reg. 50566, 50581 (Sept. 25, 2019) (adding "FDA *will review* the marketing plan to evaluate potential youth access to, and youth exposure to the labeling, advertising, marketing, or promotion of, a new tobacco product.") (emphasis added). It also noted marketing plans would be: (i) "relevant" and "important" to the APPH finding (*id.* at 50580); "help" FDA understand the impacts of a product's marketing and whether it is APPH (*id.* at 50580-81); and "provide valuable insight into the likelihood" youth would use the product (*id.* at 50581).

FDA made similar statements in the final PMTA rule, which was promulgated before the MDOs were issued in these cases, noting that marketing plans would: (i) be "critical" to assessing potential initiation and cessation (86 Fed. Reg. at 55323-24, 553226-27); (ii) be "necessary" for FDA to gauge youth access to the product (*id.* at 55322); (iii) "allow" FDA to consider whether the manufacturer had addressed youth access (*id*. at 55322, 55324); (iv) "help" FDA determine whether the product is APPH (*id.* at 55322); (v) be "directly relevant to the subject matter of [the] PMTA" (*id.* at 55324); and (vi) "directly inform" FDA whether there are concerns regarding underage use (*id.*).

Likewise, in the June 2019 PMTA guidance, FDA said it would weigh marketing and access restrictions that would decrease the likelihood of underage use. FDA-003978; *see also* FDA-004016 (sales restrictions will "help support a showing that permitting the marketing of the product would be" APPH). In fact,

FDA recommended in an April 2020 enforcement policy "adequate measures" that manufacturers of open-system e-liquids could take to guard against underage use.[10] FDA-003472-75. These measures included: (i) monitoring retailer compliance with age-verification and sales restrictions; (ii) establishing a manufacturer's right to terminate a retailer relationship if the retailer fails to comply with underage restrictions; (iii) requiring retailers to limit the quantity of ENDS a customer may purchase within a given period of time; (iv) obligating retailers to implement mystery shopper programs; and (v) establishing a policy of notifying FDA of retailer violations. *Id.*

Importantly, FDA also requested in the 2019 PMTA guidance that, for products already in the marketplace, manufacturers submit sales and use data from, for example, national surveys. FDA-004004-05. These comments mirrored an October 2018 public meeting where FDA stated "[i]nferences regarding youth may be extrapolated from young adults, as well as derived from marketing data…[and]

[10] This brief cites to the 2020 enforcement policy as referenced in the Vertigo administrative record. The records for Vapermate, Elite, and American Vapor also reference this document. The White Cloud record does not include the 2020 enforcement policy, but it would have equally applied to White Cloud's ENDS, as it did to every ENDS product on the market covered by the TCA.

national surveys."[11] FDA asked for this type of information to better understand underage use patterns. FDA-004005.

Finally, where an ENDS product is found to be APPH, Congress explicitly gave FDA authority to withdraw a marketing granted order ("MGO") if it finds the "continued marketing of such tobacco product no longer is appropriate for the protection of the public health." 21 U.S.C. §387j(d)(1)(A); *see also* 21 C.F.R. §1114.35. Along these lines, the final PMTA rule allows FDA to impose post-marketing surveillance requirements, such as: (i) reporting sales and distribution data showing "[d]emographic characteristics of product(s) purchasers, such as age…"; and (ii) a "summary of the implementation and effectiveness of policies and procedures regarding verification of the age and identity of purchasers of the product." 21 C.F.R. §§1114.31, 1114.41.

V. FDA Consistently Treated Menthol-Flavored Products Differently Than Other Non-Tobacco Flavored ENDS Products

Before the PMTA deadline, FDA characterized menthol-flavored products as relatively low risk. In the April 2020 enforcement guidance, FDA stated it was focused on "flavored, cartridge-based ENDS products (other than tobacco- or menthol-flavored [ENDS] products)." FDA-003454. FDA explained this "strikes an appropriate balance between restricting youth access to [flavored, cartridge-

[11] FDA, *Premarket Tobacco Product Application Content Overview*, at 18 (Oct. 23, 2018), https://tinyurl.com/yacczkz8.

based products], while maintaining availability of potentially less harmful options for current and former adult smokers who have transitioned or wish to transition completely away from combusted tobacco products." FDA-003471.

Moreover, in September 2021, FDA publicly released a "Sample Decision Summary Document"—a template of what is called a Technical Project Lead ("TPL") Review which is issued in support of each MDO—stating "[t]he term flavored ENDS in this review refers to any ENDS other than tobacco-flavored and menthol-flavored ENDS…Applications for menthol-flavored ENDS will be addressed separately. When it comes to evaluating the risks and benefits of a marketing authorization, the assessment for menthol ENDS, as compared to other non-tobacco-flavored ENDS, raises unique considerations."[12] As the April 2020 enforcement guidance explained, "[m]enthol is unique" because "it is the only characterizing flavor available in cigarettes" and smokers may look to menthol ENDS to "completely move away from combusted products." FDA-003474.

VI. FDA Represented That It Would Issue At Least One Deficiency Letter To An Applicant Before Issuing A Marketing Decision

FDA told manufacturers there would be some communication during the review process before it made a marketing decision. During the October 2019 public meeting, FDA stated if it "has any questions or identifies additional

[12] *See* https://tinyurl.com/fdstvzhj.

information needed to render a decision, FDA may choose to issue a Deficiency Letter." FDA-004019. FDA then clarified at a June 2021 virtual meeting that it would issue at least one "deficiency letter" giving the applicant a chance to correct any shortcomings in the PMTA.[13]

VII. Petitioners' PMTAs

A. White Cloud Cigarette's ("White Cloud") PMTA

White Cloud was formed in 2008 to help adult smokers transition from smoking traditional combustible cigarettes to using high quality ENDS products. White Cloud Stay Mot., No. 24-60424, M. Murry Decl., Doc. 25-2 at 1-2. The company's goal is to help consumers avoid the most harmful aspects of smoking combustible cigarettes and assist them in transitioning completely away from their smoking habits. *Id.* at 2. White Cloud's PMTA was an immense undertaking. The company spent well over one million dollars and about 4,000 hours to prepare its PMTA. *Id*. at 18. White Cloud submitted its PMTA on September 8, 2020, seeking authorization for 104 menthol, "unflavored," and non-tobacco flavored ENDS in various categories—open-system e-liquids, disposable ENDS, and closed-system, cartridge-based ENDS. FDA-WHITECLOUD-000001-000071.[14]

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[13] *See* https://tinyurl.com/4xw6c7w6 at 24.

[14] White Cloud filed a PMTA Withdrawal Amendment on June 27, 2025, to remove zero nicotine PMTAs for seventeen of its products. FDA-WHITECLOUD-000078.

White Cloud performed various testing and conducted extensive research regarding the safety of its products, showing they are safe to be marketed to appropriately aged consumers. For example, White Cloud completed Harmful and Potentially Harmful Constituents ("HPHC") testing of its products for its PMTA based on FDA guidance. The testing results revealed the company's e-liquids have much lower HPHC levels than those found in combustible cigarettes. In fact, one of the White Cloud products that was tested, the Menthol Flavor ClearDraw MAX - 5.4%, does not contain any of the HPHCs listed in FDA's guidance. FDA-WHITECLOUDPMTA-0001-0002.

White Cloud also summarized its strict underage access restrictions. Among the steps instituted by White Cloud and outlined in the PMTA included: (i) using a state-of-the-art Lexis Nexis online age verification system that had been presented to the FDA's Center for Tobacco Products at several "Listening Sessions" throughout its development (FDA-WHITECLOUDPMTA-0003-0007); (ii) requiring every White Cloud employee to sign an Employee Age Verification Acknowledgment document promising to follow all "We Card" and White Cloud policies regarding underage access restrictions (FDA-WHITECLOUDPMTA-0008-0009); (iii) requiring wholesalers and distributors to agree to terms and conditions, subject to penalties, including adhering to the "We Card" program and all other White Cloud policies to ensure no minors purchase its products, as well as

signing a Tobacco 21 agreement addendum (FDA-WHITECLOUDPMTA-0008-0010); and (iv) prohibiting free samples (FDA-WHITECLOUDPMTA-0011).

White Cloud further discussed marketing restrictions to prevent underage use. These included: (i) having a fully integrated structure (i.e., White Cloud does not sell through third-party retailers) and focusing marketing in specialty, adult-oriented vape shops (as opposed to mass sales channels like convenience stores) (FDA-WHITECLOUDPMTA-0012-0014); (ii) employing mature product packaging that does not rely on food imagery or other graphics that might appeal to youth (cartoons, mascots, childish images) (FDA-WHITECLOUDPMTA-0011); (iii) using FDA-compliant nicotine warnings and labels that warn against underage use (FDA-WHITECLOUDPMTA-0015); and (iv) age-gating social media accounts to adults 21 years of age or older and not using social media influencers (FDA-WHITECLOUDPMTA-0016-0017).

Moreover, since 2008 White Cloud has maintained a database of its customer base, which means it had over a decade's worth of valuable insights into its target market and current customer demographics at the time the PMTA was filed. The database had 22,483 customers, with over 3,000 active customers. FDA-WHITECLOUDPMTA-0018. In 2020, the majority of flavor type purchased per order was non-tobacco flavored. FDA-WHITECLOUDPMTA-0019. In the company's most recent survey conducted in February 2020 (with almost 2,000

respondents), there were no customers below the age of 25, with around 66% over the age of 55, thus demonstrating White Cloud's products do not appeal to youth and mostly attract older adult smokers looking for an alternative to combustible cigarettes. FDA-WHITECLOUDPMTA-0020.

Almost all respondents were long-time smokers, with 85% having been a smoker for five years or more, and the majority indicating they typically smoked a little more or less than a pack-a-day. FDA-WHITECLOUDPMTA-0021-0022. Moreover, while over 70% said they had been unable to quit smoking using traditional nicotine replacement therapies (e.g., gums, patches), the vast majority reported they had been able to completely quit smoking using ENDS. FDA-WHITECLOUDPMTA-0023-0024. Over 75% said they had quit smoking within three months. FDA-WHITECLOUDPMTA-0024.

Approximately 88% of White Cloud's customers said they "started vaping to help me quit smoking and better my health." FDA-WHITECLOUDPMTA-0025. Around 85% of the respondents had been vaping for over two years, with 57% having vaped for over 4 years. FDA-WHITECLOUDPMTA-0021. While just over half (52%) of them began vaping White Cloud tobacco-flavored ENDS when they started, FDA-WHITECLOUDPMTA-0026, almost 75% eventually gravitated to White Cloud non-tobacco flavored ENDS, including menthol-flavored (33%), FDA-WHITECLOUDPMTA-0027. About 70% of its customers reported they

noticed a "significant improvement" in their health after switching to vaping. FDA-WHITECLOUDPMTA-0028.

And White Cloud's efforts to prevent underage access to their products had so-far proven effective as demonstrated by FDA's own national survey—the National Youth Tobacco Survey ("NYTS"). The NYTS, conducted annually by FDA and the Center for Disease Control ("CDC") and involving tens of thousands of high school and middle school respondents, showed that minors were not using White Cloud ENDS. No high school or middle school respondent in 2021, 2022, or 2023 reported having used a White Cloud product.[15]

B. Vertigo Vapor, LLC's ("Vertigo") PMTA

Vertigo was formed in 2014 and is a small, U.S.-based manufacturer of open-system e-liquids. Vertigo Stay Mot., No. 24-60332, T. Vo. Decl., Doc. 18-2 at 1-2. Vertigo was founded to help adults transition from using traditional combustible cigarettes to using less risky alternatives. *Id*. Vertigo submitted its PMTA on September 4, 2020, which sought approval for ten "Glacier Mint"

[15] *See* NYTS Historical Data, https://tinyurl.com/yztnwy86. Although FDA explicitly relied on NYTS data in all of Petitioners' TPLs to support the MDOs, it never discussed the complete absence of Petitioners' various ENDS products from the survey responses. *See* FDA-WHITECLOUD-000371 n.ix; FDA-WHITECLOUD-000376 n.xviii; FDA-000141-000142 n.viii; FDA-000144; FDA-000146 n.xvi; FDA-VAPERMATE-000369; FDA-VAPERMATE-000372 n.xix; FDA-EliteBrothers-000095; FDA-EliteBrothers-000097 n.xv; FDA-AmericanVapor-000152; FDA-AmericanVapor-000154 n.xvii.

menthol-flavored e-liquids. FDA-000034-000039. This includes a zero-nicotine product, Baton nic-salts GLACIER MINT 0.0% 10 mL. FDA-000037.

Vertigo's PMTA proved to be expensive and time-consuming, with the company spending two years and investing several thousand dollars completing the application. Vo Decl. at 17. For example, Vertigo conducted laboratory testing of its products for Harmful and Potentially Harmful Constituents ("HPHC") and then compared those results to levels seen in other tobacco products. FDA-VertigoVaporPMTA-0001. Specifically, the HPHC testing used e-liquid data developed by similarly situated e-vapor companies participating in a PMTA Coalition along with Vertigo. *Id*. The study then compared Vertigo's open-system e-liquids HPHC results to those from conventional, combustible tobacco products (e.g., cigarettes) and a recently authorized heated tobacco product (i.e., IQOS). *Id*. The HPHC testing also included toxicological evaluations of those compounds expected to have higher exposures resulting from e-liquid use than from conventional, combustible tobacco use. *Id*.

The HPHC testing for open-system e-liquids showed large reductions in exposure when compared to the available HPHC data from combustible cigarette products, as well as the FDA-authorized IQOS. FDA-VertigoVaporPMTA-0002. The vast majority of tested HPHCs were not detected in Vertigo's products. *Id*. Even when exposures were calculated using conservative model assumptions,

exposures for HPHCs that were detected were far lower than those expected from traditional tobacco products. *Id*. Finally, for those compounds for which relatively higher exposures were expected, available toxicological information indicated these compounds would not be expected to cause any health concerns. *Id.*

The PMTA also included a January 2020 consumer use survey indicating Vertigo consumers use menthol/mint-flavored ENDS more than tobacco-flavored ENDS and have used these products to stay away from combustible cigarettes. The majority (87%) of the survey respondents used Vertigo ENDS. Over half of them (54%) were current ENDS users and former smokers. Over 64% of the respondents said they used mint/menthol flavored ENDS, contrasting with only 14% stating they used tobacco-flavored ENDS. Over 40% of the respondents reported they are using ENDS to stay away from other tobacco products like traditional cigarettes. FDA-VertigoVaporPMTA-0003-0007.

Vertigo also only sells product to adult tobacco product users. It submitted a comprehensive Sales Limitation and Marketing Plan, Distributors' and Retailers' Guidelines, and Resellers' Requirements aimed at guarding against underage use. The specific measures included: (i) focusing on marketing in specialty, adult-oriented vape shops (as opposed to mass sales channels like convenience stores) and online retailers with adequate age verification software; (ii) limiting distributors, wholesalers, and retail partners to those companies who agree with the

company's Resellers' Requirements; (iii) halting all social media platform use; (iv) using FDA-compliant nicotine warnings and labels that warn against underage use; (v) prohibiting free samples and vending machine sales (except in adult-only facilities); and (vi) limiting online sales to a quantity that is reasonable to purchase in a single transaction. FDA-VertigoVaporPMTA-0008-0010.

These measures are also working, as confirmed by recent NYTS survey results demonstrating underage consumers are not using Vertigo open-system ENDS. No high school or middle school respondent in 2021, 2022, or 2023 reported having used a Vertigo product.[16]

Finally, Vertigo intends to continue its efforts to implement effective youth access restrictions after it receives marketing authorization. In its PMTA, Vertigo outlined its "Proposed Postmarket Surveillance Program." FDA-VertigoVaporPMTA-0011-0013. This includes: (i) continuing to update its safety database as the central repository for all health and safety related information; (ii) continuing to evaluate the scientific and medical literature on ENDS and report any changes in consumer habits and safety; (iii) monitoring sales and distribution of its product including collecting customer demographic data; and (iv) conducting observational, cross-sectional surveys to evaluate the impact of marketing

[16] *See supra* note 15.

authorization on consumer perceptions and behavior, among adults of legal age who purchase tobacco products under real world conditions. *Id*.

C. American Vapor Company LLC's ("American Vapor") PMTA

American Vapor is a small-scale tobacco product manufacturer that has produced and retailed e-liquids since 2016. FDA-AmericanVaporPMTA-0001. It was founded with the goal of helping adult smokers transition from smoking more dangerous combustible cigarettes. FDA-AmericanVaporPMTA-0008-0009. American Vapor submitted its PMTA on March 26, 2021 covering 95 open-system ENDS products, including menthol and non-tobacco flavored versions that come in a range of nicotine levels (i.e., 3 mg/ml, 6 mg/ml, 9 mg/ml), as well as zero nicotine options. FDA-AmericanVapor-000052-53.

American Vapor's PMTA included three cross-sectional surveys that evaluated ENDS and cigarette use behavior and perceptions. FDA-AmericanVapor-000166. One survey involved over 600 American Vapor customers, 58% which had been vaping for at least one year. The average respondent age was 31 years-old, with 81% indicating they had smoked cigarettes. Among other key findings, 84% of the customers stated their goal was to quit smoking by using vaping, with 39% saying they had previously tried FDA-approved methods (e.g., nicotine patches) to move away from cigarettes, but only 9% saying those methods had helped. In contrast, 94% of the respondents stated

that vaping had been helpful in keeping them away from cigarettes. The majority (54%) said they used fruit flavors, with far less reporting use of menthol-flavored (6%) and tobacco-flavored (3%) ENDS products. FDA-AmericanVaporPMTA-0010-0013.

The other two consumer surveys were conducted by the Consumer Advocates for Smoke-Free Alternatives Association ("CASAA"), in 2016 and 2017. The surveys were extensive—with 8,500 and 7,000 respondents, respectively—and had results similar to those reported in the American Vapor survey. The majority of participants were adult, ex-smokers who had used vaping to quit combustible cigarettes (90% of the respondents stated they no longer smoked cigarettes). Two-thirds also responded they continued to vape in order to reduce or completely eliminate their use of tobacco products. And in the 2016 survey, the vast majority of consumers (85%) used flavors other than menthol or tobacco. *Id*.

Further, American Vapor has always taken youth access restrictions seriously. When American Vapor first opened its brick-and-mortar stores, it used self-imposed age restrictions before it became law. FDA-AmericanVaporPMTA-0001-0002. American Vapor's PMTA contained extensive proposals for its marketing and youth access restrictions aimed at preventing underage use. American Vapor is a member of the Smoke-Free Alternatives Trade Association

("SFATA") and adheres to SFATA's "Responsible Industry Network Program" (or "RIN"). FDA-AmericanVaporPMTA-0018-23. Specifically, the RIN Program includes, *inter alia*: (i) standardized age-restricted sales policies for online and in-person sales; (ii) working with adult-only retailers; (iii) providing retailers with We Card Employee, Management, and ID check trainings; (iv) participating in the TraceVerify partnership to use RFID tags on products so each product sold is traceable to a purchaser's ID; (v) ensuring its eCommerce platform has acceptable third-party age-verification software (e.g., BlueCheck); and (vi) taking corrective actions if any RIN standards are violated. *Id.*

In addition, again as part of the RIN Program, American Vapor committed to post-market surveillance. This would take the form of: (i) collecting data from manufacturers, distributors, and retailers to identify strengths and weaknesses in their supply chain networks; and (ii) collecting data in an effort to detect any new youth-attractive trends so American Vapor can take a proactive approach to combatting youth access. *Id.*

Finally, FDA's own NYTS survey data confirms American Vapor's commitment to preventing youth access has been effective. None of American

Vapor's 95 products have been reported by middle and high school students on the NYTS between 2019 to 2023. FDA-AmericanVaporPMTA-0001-0002.[17]

D. Elite Brothers, LLC's ("Elite") PMTA

Elite Brothers, LLC ("Elite") entered the open-system e-liquid industry with the goal of helping adult smokers find a satisfying alternative to conventional combustible cigarettes. FDA-EliteBrothersPMTA-0001. Elite submitted its PMTA on September 9, 2020, which sought marketing approval for approximately 75 tobacco, menthol, and flavored open-system e-liquids. FDA-EliteBrothers-000002-14. The two open-system e-liquid products subject to the challenged MDOs are menthol-flavored (and branded "Ice Wintergreen"). FDA-EliteBrothers-000031-35.

Elite spent years and hundreds of thousands of dollars to prepare its PMTA. Elite conducted extensive research and numerous studies to support its PMTA. For example, Elite modeled potential HPHC inhalation exposure levels for its products using existing data in scientific literature for comparable open-system ENDS products, combustible cigarettes, and other tobacco products (e.g., the heat-not-burn IQOS). Elite then conducted toxicological evaluations of those compounds. The results showed large reductions in HPHC exposures when compared to combustible cigarettes and the IQOS. FDA-EliteBrothersPMTA-0002-0006. Elite also provided a supplier's extractables study that detected any compounds leaching

[17] *See supra* note 15.

from product packaging and a detailed health risk assessment of any such compounds. FDA-EliteBrothersPMTA-0003; FDA-EliteBrothersPMTA-0007-0008. (citing Master File MF0000384). And Elite submitted an extensive overall literature review of any potential health risks of ENDS products supporting the conclusion that Elite's products are APPH. FDA-EliteBrothersPMTA-0002; FDA-EliteBrothers-0004; FDA-EliteBrothersPMTA-0009.

Elite's products are also for adult use only and Elite is committed to preventing underage use of their products through marketing and access restrictions. FDA-EliteBrothersPMTA-0010-0011. As a part of its PMTA, Elite submitted a "Marketing Plan" that articulated its standards for marketing, labeling, advertising, and promotional activities that are in-line with its goal to ensure its products do not fall into the hands of underage users. *Id*. For instance, Elite had instituted "Resellers' Requirements" consisting of written agreements with distributors and retailers requiring them to institute proper age-verification systems and comply with all federal, state, and local laws applicable to ENDS products, including contractual penalties for non-compliance. *Id.* Elite also had taken steps to: (i) minimize the visual appeal of its products and social media content to youth; (ii) age-restrict social media content; (iii) provide appropriate nicotine and age-restriction warnings; (iv) implement an age-verification system for online sales;

and (v) limit sales channels to adult-only retail establishments and age-restricted online retailers. FDA-EliteBrothersPMTA-0012-0015.

In addition, the Marketing Plan proposes to: (i) continue not using earned media to promote its products (e.g., influencers, bloggers, brand ambassadors); (ii) continue not maintaining a budget for media buys, marketing, and promotional activities; and (iii) prohibit free product samples for consumers. *Id*.

Elite's efforts to prevent underage access have proven effective. FDA's own NYTS results demonstrated minors were not using Elite ENDS. No underage respondent in 2019 to 2023 reported having used an Elite product.[18]

Elite also provided a Proposed Postmarket Surveillance and Post Market Study Protocol ("Proposed Postmarket Surveillance Program") in compliance with 21 C.F.R. §1114.41 to continue its commitment to safe use of its products. FDA-EliteBrothersPMTA-0016-0019. Elite's Proposed Postmarket Surveillance Program provides that Elite will conduct health and safety monitoring by: (i) establishing a database for all health and safety-related data; (ii) collecting unverified adverse events and consumer health complaints; and (iii) registering the candidate products with the American Association of Poison Control Center and conducting Poison Control Center Surveillance to monitor adverse events reported in the National

[18] *See supra* note 15.

Poison Data System database. *Id*. Elite would continue to evaluate scientific and medical literature related to ENDS products and submit any new relevant data. *Id*.

Elite's Proposed Postmarket Surveillance Program also lays out a plan to conduct postmarket data analysis by: (i) monitoring and providing summaries of the sales and distribution of the new product; (ii) collecting data about new purchasers and breaking-down that data by purchaser demographics (e.g., age, gender, race/ethnicity, and location); (iii) running postmarket studies to evaluate consumer perceptions among legal-aged purchasers; and (iv) reporting any change in the intended target market. *Id*. This analysis would assist in Elite's continued evaluation of its youth access restriction by monitoring data regarding verification of the age and identity of purchasers. *Id.*

Elite would also maintain its recordkeeping and reporting obligations to the Agency by retaining all relevant records, including: (i) lists of distributors and retailers; (ii) distributor and customer demographics; (iii) digital media sales channel tracking; (iv) youth restriction and age verification data; and (v) changes to marketing, distribution, advertising, and promotional material or changes in the target adult market. *Id*.

E. Vapermate, LLC's ("Vapermate") PMTA

Vapermate, LLC ("Vapermate") is a small business that was started in 2012 with the goal of helping adult smokers find a satisfying alternative to combustible

cigarettes by offering a variety of open-system e-liquid products. FDA-VAPERMATEPMTA-0001-0002. Vapermate's products come in a range of nicotine levels, including zero nicotine products, which allows customers "to use both non-nicotine and nicotine liquids in tandem to slowly decrease their nicotine level in small enough increments that they don't notice." *Id*.

Vapermate spent years on preparing its PMTA. *Id*. Vapermate submitted its application on September 8, 2020, which sought approval for 81 menthol and non-tobacco flavored open-system ENDS. FDA-VAPERMATE-000001-000045.

Vapermate's products are strictly for adult use only, and the company has implemented numerous measures to prevent underage access to its products. Vapermate submitted a "Youth Prevention Action Plan" as a part of its PMTA which details how Vapermate ensures its products are marketed to and accessible to adults only, including: (i) using plain black and white packaging; (ii) requiring retail stores and online sales channels to use age-verification for every transaction, including checking IDs in face-to-face transactions for customers who look under 40 years old and employing the age-checking program WeCard; (iii) tracking sales to gather customer data and monitor over-purchasing for product that might land in a minor's hands; (v) selling product with adequate warning labels; (vi) age-gating social media pages; and (vii) using tamper evident and child resistant packaging. FDA-VAPERMATEPMTA-0001-0004.

These measures have also been effective deterrents of underage use. Vapermate had been "secret shopped" at its stores on numerous occasions over a decade and had never failed to ID a customer. *Id*. Additionally, according to the National Youth Tobacco Survey ("NYTS"), underage e-cigarette users are not using Vapermate's products. Out of Vapermate's 81 menthol and non-tobacco flavored open-system e-liquids, there is no reported use of these products on the NYTS from 2019 to 2023.[19]

VIII. FDA's Marketing Denial Orders ("MDO") and Technical Project Lead ("TPL") Reviews

FDA issued MDOs applicable to the Petitioners in 2024-2025, well over three years after they filed their PMTAs.[20] FDA found each of the Petitioners' ENDS products were not APPH because their PMTAs "lack[ed] sufficient evidence demonstrating that your flavored ENDS will provide a benefit to adult users that would be adequate to outweigh the risks to youth."[21] Specifically, FDA denied the PMTAs because they did not contain a comparative efficacy study—a single, highly-specific study designed to elicit one datapoint—i.e., a randomized controlled and/or longitudinal cohort study or other study that compared the

[19] *See supra* note 15.

[20] FDA-000034-39; FDA-WHITECLOUD-000079-87; FDA-VAPERMATE-000095-101; FDA-EliteBrothers-000031-35; FDA-AmericanVapor-000048-53.

[21] FDA-000034; FDA-WHITECLOUD-000079; FDA-VAPERMATE-000096; FDA-EliteBrothers-000032; FDA-AmericanVapor-000049.

cessation benefits over time of the Petitioners' non-tobacco flavored products and a comparator tobacco-flavored product.[22]

FDA also summarily concluded in the MDOs that the proposed underage marketing and access restrictions set forth in each of the PMTAs "cannot mitigate the substantial risk to youth from flavored ENDS sufficiently to reduce the magnitude of adult benefit required to demonstrate APPH."[23] And as to Vertigo, White Cloud, and American Vapor, the MDOs claimed that consumer perception "cross-sectional surveys" included in the PMTAs did not compensate for the missing comparative efficacy studies because they did not evaluate adult switching or significant combustible cigarette reduction over time, particularly vis-a-vis Petitioners' own tobacco and other flavored products.[24]

The MDOs made clear, however, FDA did not consider any other evidence or conduct any further analysis of the PMTAs. According to FDA, "scientific review did not proceed to assess other aspects of the applications."[25] Indeed, FDA simply engaged in a box-checking exercise in which it indicated on a standardized

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[22] *Id.*

[23] FDA-000034; FDA-WHITECLOUD-000079-80; FDA-VAPERMATE-000096; FDA-EliteBrothers-000032; FDA-AmericanVapor-000049.

[24] FDA-000035; FDA-WHITECLOUD-000080; FDA-AmericanVapor-000049.

[25] FDA-000035; FDA-WHITECLOUD-000080; FDA-AmericanVapor-000049; FDA-VAPERMATE-000096; FDA-EliteBrothers-000032.

form whether each PMTA included a comparative efficacy study or other similar evidence comparing tobacco and non-tobacco flavored ENDS, or if the proposed marketing and access restrictions were "novel or materially different" than those FDA had generally found in the past to be insufficient.[26] Each checklist concludes that only if such evidence is present in the PMTA will FDA "determine if further scientific review is warranted."[27] The following images are taken from the Vertigo checklist. FDA-000121-122.

Presence of Evidence for Flavored ENDS Products

Criterion A	Present	Absent
Randomized Controlled Trial (RCT) on new product use and smoking behavior	☐	☒

Instructions: To select "Present", all of the following boxes must be checked "Yes":	Yes	No	N/A[2]
Was the RCT conducted using new products?	☐	☐	☒
Does the RCT include a tobacco-flavored arm and a flavored product arm[3]?	☐	☐	☒
Do the outcomes include users' ENDS and smoking behavior to assess switching and/or cigarette reduction (e.g., measures of cigarettes per day, smoking cessation, ENDS use)?	☐	☐	☒
Comment(s): N/A			

Criterion B	Present	Absent
Longitudinal Cohort Study (LCS) on new product use and smoking behavior	☐	☒

Instructions: To select "Present", all of the following boxes must be checked "Yes":	Yes	No	N/A[2]
Was the LCS conducted and does it include users of new products who are followed over time?	☐	☐	☒
Was use of tobacco-flavored products and other flavored products assessed[3]?	☐	☐	☒
Do outcomes include users' ENDS and smoking behavior to assess switching and/or cigarette reduction (e.g., measures of cigarettes per day, smoking cessation, ENDS use)?	☐	☐	☒

[26] FDA-000121; FDA-WHITECLOUD-000355; FDA-AmericanVapor-0001128; FDA-VAPERMATE-000345; FDA-EliteBrothers-000076.

[27] *Id.*

Criterion C
Other evidence in the PMTA(s) related to potential benefit to adults

Criterion D	Present	Absent	
Novel or Materially Different Youth Mitigation Measures	☐	☒	
Instructions: To select "Present", all of the following boxes must be checked "Yes":	**Yes**	**No**	**N/A[2]**
If the applicant has included information regarding mitigation measures to reduce the risk to youth, are these measures novel or materially different, e.g., device access restrictions?	☐	☒	☐

Moreover, FDA took this approach even though the TPLs supporting the MDOs highlighted the importance of conducting case-by-case, full scientific reviews of each PMTA. As FDA pointed out, "APPH requires FDA to *balance*, among other things, the negative public health impact for nonusers against the potential positive public health impact for current adult tobacco users."(emphasis added).[28] Indeed, in each of the TPLs, FDA maintained it would need to "determine that the *totality* of the evidence supports a marketing authorization."[29] And significantly, when weighing each PMTA's contents, the TPLs provided that as the known risks of the product increase or decrease, the burden for demonstrating a substantial enough benefit likewise increases or decreases.[30]

[28] FDA-000149; FDA-EliteBrothers-000100; FDA-VAPERMATE-000374; FDA-WHITECLOUD-000379; FDA-AmericanVapor-000156.

[29] FDA-AmericanVapor-000150; FDA-EliteBrothers-000101; FDA-VAPERMATE-000376; FDA-000092; FDA-WHITECLOUD-000380 (emphasis added).

[30] FDA-000137; FDA-WHITECLOUD-000371; FDA-VAPERMATE-000361; FDA-EliteBrothers-000093; FDA-AmericanVapor-000149.

Despite these comments, FDA did not complete a full scientific review for any of the Petitioners' PMTAs.[31] Rather, the TPLs were based solely on the absence of a comparative efficacy study, that Petitioners' marketing and access restrictions did not include "novel" measures (e.g., device access features), and that the "cross-sectional surveys" completed by some Petitioners did not compare the cessation efficacy of each company's tobacco and non-tobacco flavored ENDS products.[32] The TPLs concluded that due to the lack of such evidence "a Denial letter should be issued to the applicant…. The following deficiency should be conveyed to the applicant as the key basis for our determination that marketing of the new products is not APPH."[33] Indeed, the TPLs spend little time discussing Petitioners' products specifically and, instead, appear to consist largely of mere boilerplate language.

In fact, in all of the TPLs, FDA actually complained that conducting a full scientific review would be too "labor-intensive and time-consuming," and that ultimately any further "multidiscipline scientific review" would be "unnecessary

[31] FDA-000158; FDA-WHITECLOUD-000388; FDA-VAPERMATE-000384; FDA-EliteBrothers-000109; FDA-AmericanVapor-000166.

[32] *Id*.

[33] FDA-000159; FDA-WHITECLOUD-000389; FDA-VAPERMATE-000385; FDA-EliteBrothers-000110; FDA-AmericanVapor-000167.

and impracticable given the large volume of applications under review."[34] Instead, only a "targeted" or "screen[ing]" review was completed without ever having "conduct[ed] all of the discipline reviews to determine whether the product cannot be found to by APPH."[35] And in all of the TPLs, FDA concluded that, despite having not reviewed the entirety of each PMTA, it would therefore deny the applications for efficiency's sake.[36]

IX. FDA's Mass Denials Of Non-Tobacco Flavored ENDS Products

Based on this truncated approach, FDA has issued MDOs for over 1.2 million products, almost all of which covered non-tobacco flavored ENDS.[37] The remaining ~25 million determinations constituted instances in which FDA did not accept or file the PMTAs because they were incomplete or otherwise non-compliant. FDA has issued Marketing Granted Orders ("MGOs") for only 39 ENDS products, only six of which were for non-tobacco flavored ENDS (i.e.,

[34] FDA-000143; FDA-WHITECLOUD-000373; FDA-VAPERMATE-000368; FDA-EliteBrothers-000094; FDA-AmericanVapor-000150.

[35] FDA-000143; FDA-WHITECLOUD-000373; FDA-VAPERMATE-000368; FDA-EliteBrothers-000094; FDA-AmericanVapor-000150.

[36] *Id*.

[37] *See* FDA, *FDA Makes Determinations On More Then 99% of the 26 Million Tobacco Products For Which Applications Were Submitted* (March 15, 2023), https://tinyurl.com/3spczmy5.

menthol flavored products).[38] To date, FDA has not authorized any ENDS product in a flavor other than tobacco or menthol.

STANDARD OF REVIEW

When an ENDS manufacturer challenges an MDO, the TCA requires this Court's review be conducted pursuant to the APA, 5 U.S.C. §706(2)(A). Specifically, the Court must evaluate whether the MDO was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." *Id.* Because Petitioners also challenge the lawfulness of the MDOs under the TCA itself and the Due Process Clause of the Fifth Amendment, the Court must also determine whether the MDOs are: (i) contrary to constitutional right, power, privilege, or immunity; (ii) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; or (iii) without observance of procedure required by law. 5 U.S.C. §§706(2)(B)-(D).

SUMMARY OF ARGUMENT

This Court has repeatedly found Respondent U.S. Food and Drug Administration ("FDA") defied administrative law when denying marketing authorization for Electronic Nicotine Delivery System ("ENDS") products under

[38] *See* FDA, New Release: *FDA Authorizes Marketing of Four Menthol-Flavored E-Cigarette Products After Extensive Scientific Review* (June 21, 2024), https://tinyurl.com/yzy38mnm; FDA, *FDA Authorizes Marketing of Tobacco- and Menthol-Flavored JUUL E-Cigarette Products*, https://tinyurl.com/55v3xey7 (July 17, 2025).

the Family Smoking Prevention and Tobacco Control Act ("TCA"). Although the Supreme Court recently overruled this Court on one of those grounds, *see FDA v. Wages and White Lion Inves., LLC*, 145 S. Ct. 898 (2025) ("*Wages II*") (holding FDA did not unlawfully change its position regarding the type of information to be included in Premarket Tobacco Product Applications or "PMTAs"), this Court's decisions in, *inter alia*, *Wages and White Lion Invs., LLC v. FDA*, 90 F.4th 357 (5th Cir. 2024) ("*Wages*") (*en banc*) and *R.J. Reynolds Vapor Co. v. FDA*, 65 F.4th 182 (2023) ("*RJR*"), largely remain good law and should control here.

Unfortunately, FDA still refuses to comply. It has continued to issue marketing denial orders ("MDOs") for non-tobacco flavored ENDS, including menthol-flavored products, in violation of the TCA and Administrative Procedure Act ("APA"). As to these consolidated cases, FDA recently issued MDOs for Petitioners' non-tobacco flavored ENDS and did so without conducting a full scientific review of each PMTA because their applications did not contain what is called a "comparative efficacy study" or propose "novel" measures to limit access by minors to their products. This is similar to the approach used to reject PMTAs for over one-million non-tobacco flavored ENDS, including applications for Wages and RJR. And FDA issued the MDOs without considering FDA's own data showing minors do not use Petitioners' ENDS products, as well as test results showing these products are substantially less risky than traditional cigarettes.

In these petitions, Petitioners make the following arguments:

1. The MDOs violate the TCA and are thus *ultra vires*. To secure marketing authorization, the TCA requires an ENDS product meet the statute's "appropriate for the protection of the public health" ("APPH") standard. The TCE defines APPH in broad and sweeping terms, including the "risks and benefits" of the product to the "population as a whole" (i.e., adults, minors, users, non-users, etc.). It explicitly requires each PMTA to include data on numerous issues like health risks, product constituents, marketing plans (including steps taken to protect against underage access and use), and a product's impact on tobacco use initiation and cessation. The TCA then instructs FDA to make an APPH determination "on the basis of information submitted to FDA," "any other information before [FDA] with respect to such tobacco product," and any other data FDA deems relevant. Accordingly, the TCA envisions a holistic, multi-factored APPH analysis that demands a full substantive, scientific review of an application. The TCA does not allow FDA, as it did here, to skip entirely a full scientific review and instead conduct only an extremely limited "targeted review" (FDA's words) of a PMTA.

2. The MDOs violate the TCA and APA because FDA largely ignored without explanation extensive data establishing Petitioners' products meet the TCA's APPH standard. Despite having previously advised manufacturers such information was relevant to an APPH determination, FDA never weighed or

discussed: (i) FDA's own multi-year survey data demonstrating underage consumers are not using Petitioners' ENDS; (ii) consumer use surveys submitted by various Petitioners showing their customers are using these products, including menthol-flavored ENDS, to move away from combustible cigarettes; and (iii) product testing results establishing various Petitioners' ENDS pose far less health risk than traditional cigarettes and other tobacco products.

3. The MDOs violate the TCA and APA because FDA did not comply with notice-and-comment procedures. As this Court held in *Wages* and *RJR*, FDA has essentially imposed a de facto restriction or ban on all non-tobacco flavored ENDS, including menthol-flavored products, through the comparative efficacy study requirement—a randomized controlled trial, a longitudinal cohort study, or similar (but unspecified) study—that addressed whether Petitioners' non-tobacco flavored ENDS are better at helping adult smokers quit smoking than tobacco-flavored products. However, a flavor ban amounts to a "tobacco product standard" under the TCA, which in turn, must be promulgated through the TCA's notice-and-comment procedures. Moreover, as FDA staff had virtually no discretion to grant marketing authorization if a comparative efficacy study was missing, FDA was also obligated to comply with the APA's rulemaking procedures because the comparative efficacy standard constitutes a legislative rule.

4. FDA failed to give Petitioners fair notice that they would be required to submit a comparative efficacy study for PMTAs covering menthol-flavored products. After some of the Petitioners filed their PMTAs for such products, but before the MDOs were issued, FDA leadership issued two internal memorandums governing how FDA staff would be required to review applications for ENDS products with a menthol characterizing flavor. Those memos made clear to FDA reviewers they would have no choice but to issue an MDO if the application did not contain a comparative efficacy study. This directive stood in stark contrast to prior public statements made by FDA indicating PMTAs for menthol-flavored products were not being assessed under that standard. As this Court held in *RJR*, FDA did not provide Petitioners with fair notice of this sudden change in position, nor did it account for Petitioners' reasonable reliance interests (e.g., by issuing each Petitioner a deficiency letter so they could amend their PMTAs).

5. Whether FDA should restrict or ban non-tobacco flavored ENDS products has long been debated at the national and state levels across the country. Moreover, any significant restrictions or bans would have dire economic consequences for the ENDS industry, which employs tens of thousands and involves billions of dollars in market value. Under the Supreme Court's "major questions doctrine," "Congress must speak clearly if it wishes to assign [regulatory authority] to an agency of vast economic and political significance." And Congress

did so here under the TCA. It limited FDA's authority to restrict or ban the use of flavors only through the promulgation of a "tobacco product standard" and notice-and-comment rulemaking, something FDA has yet to do. In issuing the challenged MDOs to Petitioners, however, FDA has instead claimed implicit authority in another part of the TCA—the PMTA review provision—to institute industry-wide flavor restrictions and bans through the mere application of the comparative efficacy standard without pointing to any clear statement by Congress granting such authority. As across-the-board flavor restrictions and bans raise "major questions," the MDOs therefore cannot stand.

6. FDA acted arbitrarily and capriciously when it designated menthol-flavored products for two Petitioners as having a characterizing flavor other than menthol. FDA failed to consider relevant evidence in the PMTAs, including actual ingredient lists demonstrating these products contain menthol, when purportedly conducting a "totality of circumstances" analysis to determine the ENDS products' characterizing flavor.

7. FDA unlawfully applied the TCA to zero-nicotine products of four Petitioners. Zero-nicotine products are not subject to the TCA if the manufacturer does not intend them to be used with other tobacco products. FDA did not provide any evidence in the MDO or otherwise that those Petitioners had such intent. In fact, the PMTAs contained evidence to the contrary. Not only did some Petitioners

explain in their PMTAs why those products were included in the applications (FDA had asked manufacturers to include zero-nicotine products as part of product testing protocols), all four Petitioners offered nicotine versions of those ENDS so consumers would not need to add their own nicotine.

ARGUMENT

I. The MDO Violates The TCA And Is Ultra Vires

By refusing to conduct a full scientific review of Petitioners' PMTAs, FDA violated the TCA. 5 U.S.C. §§706(2)(A), (2)(C), (2)(D); *see City of Arlington v. FCC*, 569 U.S. 290, 297 (2013) (when agency exceeds power delegated by Congress it acts *ultra vires*). Under the statute, once FDA receives a complete PMTA, it must do more than a cursory evaluation; it must review and evaluate the application's contents in its entirety. *Loper Bright Enterprises v. Raimondo*, 144 S. Ct. 2244, 2268 (2024) (Courts must employ "traditional tools of statutory construction" when determining the "best" statutory interpretation and not defer to an agency's policy-laden approach).

The TCA's plain language provides that a PMTA shall be denied if "upon the basis of the information submitted to [FDA]…and *any other information before [FDA]*" the applicant has not demonstrated that a product is APPH. 21 U.S.C. §387j(c)(2) (emphasis added). The statute defines APPH in broad terms as the "risks and benefits to the population *as a whole*," including "users and nonusers of

tobacco products." 21 U.S.C. §387j(c)(2) (emphasis added). In this context, the TCA enumerates numerous forms of evidence relevant to APPH, including data on health risks, ingredient and additive information, manufacturing practices, product samples, labeling specimens, and any other information required by FDA. 21 U.S.C. §387j(b)(1).

Moreover, FDA must gauge not only the relative cessation benefits to adult smokers, which is the MDOs' focus, but also all other *risks and benefits* of a given product, including health factors, such as whether a product results in relatively less exposure to hazardous constituents. *See* 21 U.S.C. §387g(a)(4) (defining APPH in context of tobacco product standards as including reduction or elimination of harmful constituents). Congress, therefore, intended that any APPH determination be based on a multi-faceted analysis, weighing or balancing all data and information in a PMTA. Indeed, this is how FDA has interpreted APPH in PMTA regulations and guidance. *Supra* 7-9.

All of this is consistent with Congress's choice of words adopting the APPH standard. Congress did not employ any words or terms of limitation. Rather, they used the word "appropriate"—"the classic broad and all-encompassing term that naturally and traditionally includes consideration of all the relevant factors." *Michigan v. EPA*, 576 U.S. 743, 752 (2015) (citation omitted). Further, common definitions of "public health" are broad and refer to protecting the "community" as

a whole; they are not otherwise restricted to certain persons or population demographics.[39] And nowhere in the TCA is there any indication FDA was authorized to abandon full scientific review and instead could deny a PMTA (and, in fact, PMTAs covering over one million products) based on the alleged absence of a few selected data points.

A PMTA might be so deficient on its face that FDA should not have to spend resources on any further review. But that is not the case here. For each of the Petitioners, FDA conducted two screening exercises of the applications (called Acceptance and Filing review) and determined the PMTAs were ready for a full scientific review.[40] At this point, FDA was statutorily obligated to consider all of the PMTAs' contents. But it did nothing of the sort. Instead, it conducted a "targeted" or "screening" review that only sought to determine whether there was a comparative efficacy study and queried whether Petitioners had implemented a "novel" form of device access restriction. *Supra* 30-35.

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[39] Merriam-Webster Dictionary, https://tinyurl.com/55p876pn ("the art and science dealing with the protection and improvement of community health"); American Heritage Dictionary, https://tinyurl.com/ywxdthby ("The science and practice of protecting and improving the health of a community").

[40] FDA-AmericanVapor-000001-19; FDA-AmericanVapor-000020-38; FDA-VAPERMATE-000001-45; FDA-VAPERMATE-000046-91; FDA-EliteBrothers-000001-14; FDA-EliteBrothers-000015-30; FDA-WHITECLOUD-000001-71; FDA-WHITECLOUD-000072-78; FDA-00001-14; FDA-000015-28.

Because FDA did not follow the TCA in issuing each MDO, it acted contrary to law and the orders must therefore be set aside. 5 U.S.C. §§706(2)(A), (C); *see League of United Latin Am. Citizens v. Regan*, 996 F.3d 673, 691 (9th Cir. 2021) (failure of agency to conduct safety review of pesticide was *ultra vires* when citizen petition contained "sufficient evidence to undertake" such review).

II. FDA Acted Arbitrarily And Capriciously As It Failed To Consider Relevant Evidence, Including FDA's Own Data Demonstrating Minors Are Not Using Petitioners' ENDS Products

An agency "must examine the relevant data" and "articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *BNSF Railway Co. v. FRA*, 62 F.4th 905, 910 (5th Cir. 2023). A court "must set aside any action premised on reasoning that fails to account for relevant factors or evinces a clear error in judgment." *Univ. of Tex. M.D. Anderson Cancer Ctr. v. HHS*, 985 F.3d 472, 475 (5th Cir. 2021). An agency has acted in an arbitrary and capricious manner when it has "entirely failed to consider an important aspect of the problem." *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983). Moreover, an "agency cannot ignore evidence that undercuts its judgment; and it may not minimize such evidence without adequate explanation." *Genuine Parts Co. v. EPA*, 890 F.3d 304, 312 (D.C. Cir. 2018). In short, "the arbitrary and capricious standard requires that agency action be reasonable and reasonably explained." *Fed. Commc'ns Comm'n*

v. Prometheus Radio Project, 141 S. Ct. 1150, 1158 (2021). Here, in reviewing Petitioners' PMTAs, FDA ignored key evidence without explanation that was otherwise clearly relevant to an APPH determination.

FDA argued in the MDOs and TPLs that typical marketing and access restrictions do not adequately mitigate the risk to underage consumers and only novel device access restrictions would suffice. *Supra* 31-34. FDA never addressed, however, product-specific data showing Petitioners' efforts at marketing and access restrictions have worked. FDA told manufacturers actual sales data and national survey results would help determine risk to youth. *Supra* 11-12; *Wages*, 90 F.4th at 364-65. For example, although FDA repeatedly cited to its own NYTS data for support in the TPLs (*supra* note 15), not a single NYTS respondent reported having used any of Petitioners' ENDS. *Supra* 18; 21; 24-25; 27; 30.[41] Certainly, underage use information regarding Petitioners' products would help gauge the actual risks posed by those ENDS. But nowhere in the MDOs or TPLs did FDA even mention its own data indicating minors were *not* attracted to or using Petitioners' products, let alone explain why that evidence was completely written off during the review of Petitioners' PMTAs.

[41] *See also* White Cloud and American Vapor PMTAs containing customer survey data showing the average customer age was well above 21 years-old. *Supra* 17 (66% percent of respondents over age of 65); *supra* 22 (average age 31 years-old).

Under the TCA and FDA's own regulations, it must balance "all" relevant information in an application on an "individualized" basis, including data going directly to Petitioners' products. *Supra* 6-9. FDA deemed product-specific information as relevant to APPH, and here it could tip the scales in favor of an APPH finding. At a minimum, if youth are not using Petitioners' products, then the lack of a comparative efficacy study (which presupposes significant underage use of ENDS products) takes on much less significance. But FDA never considered this evidence or explained why it was ignored. That is the epitome of arbitrary and capricious decision-making.

Moreover, on the benefits side of the ledger, despite instructing manufacturers that perception studies would be relevant to APPH, *supra* 9, the TPL never weighed the results of consumer use surveys submitted by White Cloud, Vertigo, and American Vapor. Those surveys indicated adult former smokers were using those manufacturers' ENDS products, including menthol/mint-flavored products (and at higher rates than tobacco-flavored ENDS), and they were using ENDS to stay away from combustible cigarettes. *Id.* All of this supports a finding of APPH, yet FDA gives it short shrift. In fact, the MDOs and TPLs indicate that all FDA asked in its limited reviews was whether those surveys rose to the level of a comparative efficacy study. *Supra* 30-33 (*see* reviewer checklists).

Further, although the TPLs acknowledged that ENDS "are likely to have fewer and lower concentrations" of HPHCs than combustible cigarettes, FDA argued it must confirm product-specific data on a "case-by-case basis."[42] Yet FDA did not consider aerosol data from White Cloud and Vertigo showing their ENDS present substantially lower health risks from HPHC exposures than combustible cigarettes and other tobacco products. *Supra* 15; 19-20.[43] FDA does not cite to any discussion or analysis in the TPLs of any HPHC comparison data or consider such results in the context of the consumer surveys showing adult smokers are in fact using those products to stay away from combustible cigarettes. FDA must explain its rationale based on all relevant evidence instead of brushing aside data indicating users are, in reality, significantly reducing their exposures to HPHCs.

FDA admitted as the risk to youth goes down, so does the magnitude of adult benefit needed to show APPH. *Supra* note 30. Yet FDA never discussed these data—or any other information in the PMTAs—even though FDA's own evidence suggests minors are not using Petitioners' ENDS and that these products are

[42] *See* FDA-000149; FDA-WHITECLOUD-000379; *see also* FDA-VAPERMATE-000374-000375; FDA-EliteBrothers-000100; and FDA-AmericanVapor-000157 (similar).

[43] FDA also ignored HPHC modeling conducted by Elite based on existing data in scientific literature and toxicological evaluations of those substances. The results showed large reductions in HPHC exposures compared to combustible cigarettes and other tobacco products. *Supra* 25-26.

reduced harm products. FDA agreed an APPH finding requires a "balancing" of *all* risks and benefits, *supra* 7, but without explanation failed to do so. *RJR*, 65 F.4th at 191-92 (faulting FDA for ignoring data on reduced harm evidence and low youth use rates).

In fact, FDA was motivated by at least one factor that is entirely irrelevant to the APPH standard. FDA griped that a "multi-disciplined scientific review" would be too time-consuming given the number of PMTAs that were filed. *Supra* 34-35. However, efficiency goals "cannot save an arbitrary agency policy." *Judulang v. Holder*, 565 U.S. 42, 63-64 (2011) (holding irrelevant agency goal to save time and money); *Michigan*, 576 U.S. at 750-51 (efficiency is no substitute for "reasoned decision-making").

In the end, FDA completely abandoned the all-encompassing PMTA review process set out by Congress in the TCA and FDA's own, long-standing interpretation of APPH. *Supra* 31-34. FDA said it must consider "all" information in a PMTA and evaluate the application on an "individualized" basis. *Supra* 7. FDA characterized APPH broadly, describing it as a "multi-disciplinary" and "weighing" approach, and noting it must "consider many factors" going to the "population as a whole" and eschew any notion that an applicant must meet specific criteria or else be denied. *Supra* 7-8. FDA's "targeted" reviews represent a wholesale failure in this regard.

III. FDA Instituted A De Facto Restriction And/Or Ban On Non-Tobacco Flavored ENDS Through The Comparative Efficacy Study Requirement In Direct Violation Of The TCA's Notice-And-Comment Procedures

Congress required in the TCA that FDA comply with notice-and-comment procedures before adopting what is called a "tobacco product standard." 21 U.S.C. §387g(c)(1) (FDA must publish "a notice of proposed rulemaking for the establishment…of any tobacco product standard."). Among other things, FDA must "set forth a finding with supporting justification that the tobacco product standard is appropriate for the protection of the public health [or APPH]" and provide "not less than 60 days" for public comment. 21 U.S.C. §§387g(c)(2)(A), (4). Then, before issuing the final standard, FDA must consider comments submitted in response to the proposal (including "information concerning the countervailing effects of the tobacco product standard on the health of adolescent tobacco users, adult tobacco users, or nontobacco users…," as well as the creation of a significant demand for contraband or black market products), and ultimately make an APPH determination. 21 U.S.C. §§387g(b)(2), (d)(1). Additionally, the standard must account for the interests of ENDS manufacturers, including "economic loss to…domestic…trade," as well as the "technical achievability of compliance with the standard." 21 U.S.C. §387g(d)(2).

As pertinent here, Congress also made clear in the TCA that any restriction or ban on a given flavor would constitute a "tobacco product standard." These

standards include, *inter alia*, the "reduction or elimination of an additive, constituent…or other component of a tobacco product because [FDA] has found that [they are] or may be harmful," "provisions respecting the…ingredients, additives, constituents…and properties" of the tobacco product," and "provisions for the reduction or elimination of other constituents [in addition to nicotine yields]…or harmful components of the product." 21 U.S.C. §387g(a)(3)-(4); *see also* FDA-003971-72 (2019 PMTA guidance defining "additive" and "component" as including "flavoring" and "flavors."). Indeed, FDA conceded as much when it stated in the 2020 enforcement guidance that "restricting or eliminating the use of flavors" in ENDS would be a "tobacco product standard." FDA-003485; *see also* 87 Fed. Reg. 26454, 26456 (May 4, 2022) (FDA proposing a tobacco product standard that would have banned menthol as a characterizing flavor in cigarettes); 21 U.S.C. §387g(a)(1) (TCA establishing a tobacco product standard that banned characterizing flavors in traditional cigarettes other than tobacco or menthol).

Accordingly, there can be no question the comparative efficacy study requirement constitutes a tobacco product standard, effectively restricting and/or banning all non-tobacco flavors. The checklist forms used by FDA in these reviews: (i) only applied to PMTAs for non-tobacco flavored ENDS; (ii) required a comparison of non-tobacco flavored ENDS against a tobacco-flavored

comparator product; and (iii) would only move the non-tobacco flavored product to scientific review if there was an RCT, longitudinal cohort study, or similar study showing such product was better at helping smokers quit than a tobacco-flavored comparator. *Supra* 31-33. Likewise, the underlying TPLs stated FDA would refuse to conduct any further scientific review and instead deny the application if one of these studies was absent from the PMTA. *Supra* 34.

Since 2021, when it began applying the comparative efficacy standard, FDA has only approved six menthol-flavored ENDS products and has not granted marketing authorization for a single non-tobacco, non-menthol flavored product. *Supra* 35-36. Tellingly, FDA has rejected to date 1.2 million non-tobacco flavored ENDS using the comparative efficacy standard, with the few authorized menthol ENDS constituting a mere 0.0006% of that total. *Id.* To be clear, this is not FDA coincidently reaching the same conclusion after a thorough, case-by-case evaluation of over one million, non-tobacco flavored ENDS. Rather, FDA has enforced the comparative efficacy requirement in practice as though it were a tobacco product standard—effectively restricting or banning nearly all non-tobacco flavored products across the board—while failing to substantively review the PMTAs as required by the TCA.

Indeed, the *en banc* panel of this Court in *Wages* already found FDA did just that—it unlawfully applied the comparative efficacy test to effectively achieve a de

facto ban on non-tobacco flavored ENDS without complying with the TCA's notice-and-comment procedures. *Wages II*, 90 F.4th at 384 n.5, *vacated and remanded on other grounds*, 145 S. Ct. at 898. The Court held:

> FDA's categorical ban has other statutory problems. For example, the TCA states that FDA must follow notice-and-comment procedures before adopting a "tobacco product standard." *See* 21 U.S.C. §387g(c)-(d). And Congress specifically called a ban on tobacco flavors a "tobacco product standard." *See id.* §387g(a)(1)(A)…;*see also id.* §387g(a)(2)…FDA *unquestionably* failed to follow §387g's notice-and-comment obligations before imposing its de facto ban on flavored e-cigarettes.

Id. (emphasis added). This definitive holding, which is supported by statutory analysis and citations, is controlling here. *See U.S. v. Potts*, 644 F.3d 233, 237 (5th Cir. 2011) (citing to a footnote in another Fifth Circuit decision as an "alternate holding that carries the force of precedent" and is more than "mere *dictum*") ("This Circuit follows the rule that alternative holdings are binding precedent and not obiter dictum") (citations omitted). At a minimum, this is compelling and persuasive authority from an *en banc* panel that FDA ignored the TCA's notice-and-comment rulemaking requirements.

The Supreme Court's decision in *Wages II*, moreover, does *nothing* to change this fact. The Court explicitly stated it was not deciding whether FDA had an obligation to adopt the comparative efficacy standard through notice-and-comment rulemaking. 145 S. Ct. at 915-16 ("We did not grant certiorari on that question, and without adequate briefing, it would not be prudent to decide it

here."); *see Tong v. Lumpkin*, 90 F.4th 857, 863-64 (5th Cir. 2024) (concluding a Fifth Circuit case that had been abrogated by several Supreme Court cases "remains binding in this circuit" on precedent not addressed in the Supreme Court decisions). Further, *Wages II* supports the conclusion FDA unlawfully applied a tobacco product standard without satisfying the TCA's notice-and-comment requirements. While the Court noted agencies are generally free to develop regulatory standards through individual adjudications, it also made clear "[o]f course, if a statute requires rulemaking, the affected agency must comply." 145 S. Ct. at 915. That is precisely the situation here. Ignoring Congress's instructions to the contrary, FDA did an end-run on the TCA's rulemaking requirements and proceeded to restrict or ban virtually all non-tobacco flavored ENDS via the comparative efficacy standard.[44]

[44] The *Wages II* decision stated, "FDA never enforced a rigid 'fatal flaw' standard." *Id.* at 922. However, the Court did not say there was no de facto ban. Instead, the Court was merely referring to an internal "Fatal Flaw" memorandum that required either a clinical or longitudinal cohort study. *Id.* at 921-22. That memorandum was rescinded before the agency began issuing MDOs for non-tobacco flavored ENDS and therefore played no role in the PMTA reviews. *Id.* The Court then noted the "checkboxes" which were used by FDA reviewers also looked for "other evidence" comparing the cessation efficacy of non-tobacco and tobacco-flavored products (i.e., they were not limited to just a clinical or longitudinal cohort study). *Id.* In any event, as demonstrated throughout this brief, those checklists were used by FDA to achieve a de facto restriction or ban on all non-tobacco flavored ENDS.

Finally, under the Supreme Court's decision in *Loper*, the "best"—and, in fact, the only—interpretation of the TCA is that Congress never intended FDA to impose what amounts to a tobacco product standard through the PMTA review process. 144 S. Ct. at 2264 (requiring lower courts to employee "traditional tools of statutory construction" to determine the "best" statutory interpretation). This holds true for at least three reasons given the plain language and structure of the TCA's tobacco product standard and PMTA provisions. *See FDA v. Brown & Williamson Tabacco Corp.*, 120 S. Ct. 1291, 1301 (2000) ("It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme. A court must…interpret [a] statute as a symmetrical and coherent regulatory scheme, and fit, if possible, all parts into an harmonious whole.") (citations omitted).

First, Congress was obviously concerned that some controls placed on tobacco products, such as flavor restrictions or bans, could have such far reaching impacts on manufacturers and the marketplace that it wanted to ensure all interested stakeholders had an opportunity to comment on such limitations before they were adopted and enforced. *Supra* at 50. But here, in establishing and applying a comparative efficacy standard during the PMTA review process, FDA did not solicit input from manufacturers or consider factors such as the significant economic impact on the ENDS marketplace. It makes no sense Congress would

have obligated FDA to account for those issues in promulgating tobacco product standards, only to turn around and let FDA completely ignore them in the PMTA process under an APPH provision that never mentions industry-wide bans. *See Texas v. U.S.*, 809 F.3d 134, 179-84 (5th Cir. 2015) (this Court holding Department of Homeland Security could not claim authority in various sections of the Immigration and Nationality Act ("INS") to establish one set of criteria for deferred action against illegal immigrants when other INS sections explicitly provided different factors that must be satisfied for illegal immigrants to lawfully remain in the U.S.); *New Jersey v. EPA*, 517 F.3d 574, 578, 582 (D.C. Cir. 2008) (vacating EPA's delisting of certain utilities from regulation under the Clean Air Act ("CAA") where agency cited one CAA provision for support but another CAA provision specifically set forth different factors that must be met for delisting).

Second, the PMTA provisions are not entirely separate or distinct from the tobacco product standard provisions. Congress linked the two and ensured FDA would still be able to take into consideration tobacco product standards when deciding whether to deny marketing authorization. The TCA explicitly allows FDA to issue an MDO if a PMTA does not comply with a tobacco product standard. 21 U.S.C. §387j(c)(2)(D) (FDA to issue MDO if "such tobacco product is not shown to conform in all respects to a tobacco product standard in effect under [21 U.S.C. §387g], and there is a lack of adequate information to justify the deviation from

such standard."). As such, Congress gave FDA authority to deny marketing authorization based on a standard that is effectively an industry-wide flavor restriction or ban, but only if it has gone through the prescribed notice-and-comment rulemaking process.

Third, to further ensure the tobacco product standard and PMTA provisions work together in a consistent manner, Congress explicitly requires FDA to find that a tobacco product standard is APPH. Just as it does when reviewing a PMTA, in promulgating a tobacco product standard, FDA must consider the risks and benefits to the population as a whole, including cessation and initiation. 21 U.S.C. §387g(a)(3)(B)(i). That way, if FDA applies an across-the-board standard to all similarly situated ENDS products, Congress would be assured such an approach still incorporates the TCA's APPH standard, while at the same time accounts for critical stakeholder input during notice-and-comment rulemaking.

In the end, because FDA unquestionably did not follow the TCA's notice-and-comment procedures before imposing the comparative efficacy standard to Petitioners' PMTAs, this Court must vacate and remand the MDOs. 5 U.S.C. §706(2) (allowing courts to hold unlawful and set aside agency action "found to be…without observance of procedure required by law").

IV. FDA's Comparative Efficacy Requirement Violated The APA's Notice-And-Comment Procedures

FDA also contravened the APA's rulemaking procedures when it gave agency staff no choice but to issue an MDO if a PMTA for non-tobacco flavored ENDS did not contain a comparative efficacy study.

Under the APA, a "rule" means "the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy…" 5 U.S.C. §551(4). A rule, in turn, must then be promulgated through notice-and-comment rulemaking, including a statement of "basis and purpose" upon issuing a final rule. 5 U.S.C. §§553(b)-(c).

In the instant case, the comparative efficacy standard is clearly a "rule," as it was designed to implement the TCA and has been applied by FDA to deny PMTAs for 1.2 million non-tobacco flavored ENDS, including all non-tobacco flavored or non-menthol flavored products. *Supra* 35-36. Indeed, the TPLs, which summarize FDA's rationale for the comparative efficacy standard, read more like a preamble to an agency rulemaking than a case-by-case evaluation of a PMTA; in fact, the TPLs barely mention Petitioners' products at all.

So, the only remaining question is whether the comparative efficacy standard is exempt from APA rulemaking. The answer is "no." In this Circuit, whether FDA's comparative efficacy approach is a substantive rule "turns on whether an agency intends to bind *itself* to a particular legal position." *RJR*, 65

F.4th at 193 (citing *Texas v. EEOC*, 933 F.3d 433, 441 (5th Cir. 2019)). "An action is binding if it appears on its face to be binding, is applied by the agency in a way that indicates it is binding, or retracts an agency's discretion to adopt a different view of the law." *Id.* (citations omitted). "Further, a substantive rule "affects the rights of broad classes of unspecified individuals." *Id.* (quoting *City of Arlington v. FCC*, 688 F.3d 229, 242 (5th Cir. 2012)).

Here, the comparative efficacy standard, as applied in the MDOs, checklists, and TPLs, is a legislative rule requiring notice-and-comment rulemaking as it plainly limited what FDA could consider in each PMTA and afforded FDA little discretion when a comparative efficacy study was missing. To begin, along with the question of "novel" access measures, the checklists state that the FDA's review was limited to a clinical study, longitudinal cohort study, or similar study comparting the cessation efficacy of each company's tobacco-flavored and non-tobacco-flavored ENDS products. *Supra* 32-33. Consequently, the reviewers were not to evaluate any other information in the PMTA.

Moreover, the MDOs, checklists, and TPLs indicate that if such evidence is missing, then FDA reviewers would not be authorized to conduct any further scientific review. *See*, *e.g.*, *supra* 31 (MDOs stating "scientific review did not proceed to assess other aspects of the applications"); *supra* 32 (checklists concluding that only if the PMTA contained a comparative efficacy study would

FDA "determine if further scientific review is warranted"); *supra* 34 (TPLs providing "a Denial letter should be issued to the applicant" where the applicant did not complete such a study). Once FDA's reviewers marked the "Absent" boxes in the checklists, and otherwise determined there was no other evidence resembling a comparative efficacy study, FDA's work was done.

Finally, FDA has consistently enforced its comparative efficacy standard as an across-the-board, binding norm. Where the comparative efficacy standard has been applied, FDA has never granted marketing authorization to a non-tobacco flavored, non-menthol flavored ENDS where the study was missing (and only granting MDOs to six menthol products where the study was submitted); instead, it issued MDOs to over one million such products, affecting the rights of hundreds of manufacturers. *Supra* 35-36; *see Texas*, 809 F.3d at 171-73 (finding immigration policy binding and thus requiring notice-and-comment rulemaking because it was applied in the same manner across 95% of thousands of applications).

FDA will likely argue in response that it is also free under the APA to adopt a rule or regulation in an adjudication. And we recognize the Supreme Court in *Wages II* noted FDA was not required under the TCA to issue guidance detailing the comparative efficacy standard as that "would be in tension with *Chenery II's* teaching that, absent a statutory prohibition, agencies may generally develop

regulatory standards through either adjudication or rulemaking." 145 S. Ct. at 925 (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 202-03 (1947)).

However, *Wages II* does not entirely answer the question of whether FDA violated the APA's notice-and-comment requirements. First, as already discussed, the TCA does in fact prohibit FDA from adopting something like the comparative efficacy standard without formal rulemaking. *Supra* 50-57. Further, as demonstrated above (*supra* 30-35), FDA never moved Petitioners' PMTAs to a full scientific review; it did not fully adjudicate the applications as required by the TCA. Moreover, the Supreme Court has previously noted "there may be situations where [an agency's] reliance on adjudication would amount to an abuse of discretion." *NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294 (1974). Indeed, "[a]n agency adjudication may require a notice-and-comment period if it constitutes de facto rulemaking that affects the rights of broad classes of unspecified individuals." *MacLean v. Dep't of Homeland Sec.*, 543 F.3d 1145, 1151 (9th Cir. 2008).

That is exactly what has happened here. The MDOs, checklists, and TPLs set forth a comparative efficacy standard that has been enforced against PMTAs filed by hundreds of ENDS manufacturers for over one million products. Indeed, the standard is clearly written so as to easily apply to any PMTA and to cover a "broad class" of manufacturers going forward. And, the comparative efficacy standard has been applied in a manner that established a de facto restriction and/or

ban on non-tobacco flavored ENDS products. *Supra* 35-36; *see RJR*, 65 F.4th at 193-94 (this Court holding in a case involving menthol-flavored ENDS that the comparative efficacy test was binding on FDA staff, has been applied in practice as if it is binding, and has impacted the rights to thousands of applicants).[45]

Accordingly, while agencies generally have authority to adopt regulations in adjudications, in this case it was an abuse of discretion to do so and, in the process, violate the APA's rulemaking requirements. 5 U.S.C. §553; *see also Texas*, 809 F.3d at 171 (applying APA notice-and-comment rules to agency policy that had been enforced as if it was binding on thousands of applicants).

V. Internal Memoranda Governing Review Of Menthol-Flavored ENDS Further Confirm FDA Violated The TCA's And APA's Notice-And Comment Requirements, And Failed To Give Petitioners Fair Notice Of The Comparative Efficacy Study Requirement

FDA denied marketing authorization for numerous menthol-flavored products submitted by three of the Petitioners—White Cloud, Vapermate, and American Vapor.[46] The administrative records for these matters reference two internal agency memorandums that, collectively, dictate how FDA staff would

[45] Although *RJR's* holding relied, in part, on the comparative efficacy study requirement as set forth in the internal FDA "Fatal Flaw" memorandum, there is no doubt the checklists still meant an MDO would be issued if the required study (whether a clinical, longitudinal cohort, or other similar study) comparing the efficacy of non-tobacco and tobacco-flavored ENDS was absent.

[46] FDA-WHITECLOUD-000083-86; FDA-VAPERMATE-000099-100; FDA-AmericanVapor-000052.

review PMTAs for ENDS products with a menthol characterizing flavor.[47] They required FDA staff in no uncertain terms to apply the comparative efficacy study to all such PMTAs and, consequently, to issue an MDO—prior to initiating the statutorily required scientific review—for any PMTA that does not contain a comparative efficacy study. As discussed below, these documents confirm— (i) FDA failed to adopt that standard as applied to menthol-flavored products through notice-and-comment rulemaking as required by the TCA and APA; and (ii) FDA failed to give these Petitioners fair notice of the study requirement as it applies to menthol-flavored ENDS or otherwise account for their good faith reliance on previous public statements made by FDA indicating such products were not being subjected to the comparative efficacy standard.

Although the Supreme Court's *Wages II* decision held FDA did not unlawfully change its position regarding what information and data must be included in a PMTA when it applied the comparative efficacy study requirement to PMTAs for non-tobacco-flavored ENDS (e.g., fruit-flavored products), the Court

[47] FDA, Memorandum to File from Brian A. King, PhD, MPH, *Process for Evaluating Menthol-Flavored ENDS PMTAs* (Oct. 25, 2022) ("King Memo"); FDA, Memorandum to File from Benjamin Apelberg, Ph.D., *Development of the Approach to Evaluating Menthol-Flavored ENDS PMTAs* (Oct. 25, 2022) ("Apelberg Memo"). *See* memos at FDA-WHITECLOUD-005984-5988; FDA-VAPERMATE-005941-5945; FDA-VAPERMATE-005946-5948); FDA-AmericanVapor-005678-5682; FDA-AmericanVapor-005683-5685. For convenience, this brief only cites to the American Vapor versions.

did not address that standard's application to menthol-flavored ENDS or, in particular, the impact of the two internal memoranda.

A. The Internal Memoranda Require FDA To Apply The Comparative Efficacy Study Requirement To PMTAs For Menthol-Flavored ENDS

As noted above (*supra* 12-13), FDA issued publicly-available documents in 2020 (TCA enforcement policy) and 2021 (template "TPL") which made clear to Petitioners: (i) FDA was placing a lower enforcement priority on menthol-flavored ENDS than other non-tobacco flavored ENDS products (e.g., fruit-flavored); and (ii) in denying PMTAs for millions of non-tobacco flavored ENDS based on the comparative efficacy standard, it would assess menthol-flavored products differently (i.e., FDA was not applying the comparative efficacy standard to menthol-flavored ENDS). FDA reasoned that menthol-flavored ENDS pose relatively less risk of underage use than other non-tobacco flavored products, but at the same time offered adult, addicted smokers, especially those using menthol-flavored cigarettes, with a product that could help them transition away from more dangerous combustible tobacco products.

The Apelberg Memo confirms FDA continued to take this approach well into 2022. The Office of Science ("OS"), which sits within FDA's Center for Tobacco Products ("CTP") and has authority to issue orders denying marketing authorization, reviewed a PMTA for menthol-flavored ENDS submitted by Logic

Technology Development ("Logic") and recommended the products be granted marketing authorization. FDA-AmericanVapor-005684. OS explained menthol-flavored ENDS may present a less harmful substitute for addicted smokers using menthol-flavored combustible cigarettes, while also acknowledging minors may use menthol-flavored ENDS at lower rates than other non-tobacco flavors. *Id.* Accordingly, OS found the benefits to adult smokers possibly transitioning away from combustible cigarettes using menthol-flavored ENDS may outweigh known risks to minors. *Id.*

It was at this point, in July 2022, that CTP appointed a new director (Dr. Brian King) and, within just a few months, OS did a complete about-face. Despite the fact OS personnel expressed "concerns" with a different approach, ENDS manufacturers would now be "required" in their PMTAs to include a comparative efficacy study showing their menthol-flavored products are more effective at helping smokers quit than a comparator tobacco-flavored ENDS. FDA-AmericanVapor-005681. Although the King and Apelberg Memos cited almost no specific evidence in support, OS reversed its recommendation from just three months prior and determined menthol-flavored ENDS were not differentially effective relative to tobacco-flavored products at transitioning addicted smokers away from cigarettes. FDA-AmericanVapor-005685. OS then committed to applying this new standard to PMTAs seeking marketing authorization for

menthol-flavored ENDS products. *Id.* (OS staff "then applied this approach to the Logic application, *as they will* to other pending applications for menthol-flavored ENDS.") (emphasis added).

While the King and Apelberg Memos cast this change in position as an outgrowth of on-going debate between CTP's new director and OS, this Court has determined otherwise. In preliminarily enjoining MDOs issued for R.J. Reynolds' menthol-flavored VUSE ENDS products, this Court described any back-and-forth as a one-sided affair:

> This is where the plot thickens. Internal memoranda circulated among [CTP and OS] emerged in December 2022….These reveal that OS, well into reviewing a PMTA for a menthol-flavored e-cigarette, recommended in late 2021 that the PMTA be granted because benefits to smokers likely outweighed the known risks to youth from marketing of the products. Then in July 2022, a new CTP director appeared on the scene and *told* OS that the approach to menthol-flavored ENDS should be the same as for other flavored ENDS….OS then changed its position. These memoranda are *strong evidence* that CTP developed and internally circulated new criteria for evaluating PMTAs for menthol-flavored ENDS in Summer 2022.

RJR, 65 F.4th at 191-92 (emphasis added) (internal quotations omitted); *see also Logic Tech. Dev. LLC v. FDA*, 84 F.4th 537, 559-61, 564 (3d Cir. 2023) (dissenting judge expressly agreeing with the Fifth Circuit and finding CTP "overruled" OS and "unilaterally" ordered a new approach, with OS then "acquiesc[ing] to King's policy decision").

B. The Internal Memoranda Confirm FDA Did Not Proceed Under The TCA's and APA's Notice-and-Comment Procedures

The King and Apelberg Memos further substantiate the fact that FDA ran afoul of the TCA's and APA's notice-and-comment procedures, instead imposing a de facto ban on non-tobacco flavored ENDS products, particularly those with a menthol characterizing flavor. Both memos explicitly foisted onto FDA staff a *binding* standard to be applied in all PMTA reviews of menthol-flavored ENDS. The King Memo states the comparative efficacy study requirement "is required." FDA-AmericanVapor-005681. Likewise, the Apelberg Memo indicates FDA staff "will" apply the comparative efficacy standard to "pending applications." FDA-AmericanVapor-005685. Indeed, the King Memo's directive has been applied across-the-board by FDA to issue an MDO for virtually every non-tobacco flavored product with a menthol characterizing flavor. As this Court found in *RJR*, the "internal memoranda between CTP and OS are additional evidence that this standard remained in full effect for *all* non-tobacco-flavored e-cigarette PMTAs." 65 F.4th at 193 n.9 (emphasis added).

Nothing in the Supreme Court's *Wages II* decision changes this conclusion. The Supreme Court expressly declined to address the notice-and-comment issue. 145 S. Ct. at 915-16. Moreover, although *Wages II* noted agencies are generally permitted to adopt rules through case-by-case adjudication, that does not hold true when an underlying statute requires notice-and-comment rulemaking. *Id.* at 915.

And that exception applies here. The TCA explicitly instructs FDA to employ notice-and-comment procedures when effectively restricting or banning a non-tobacco characterizing flavor. 21 U.S.C. §387g(c). In any event, as discussed above, FDA did not proceed through adjudication as to menthol-flavored products; rather, the King and Apelberg Memos set forth a rule that requires FDA staff to issue an MDO if a PMTA does not contain a comparative efficacy study, which is precisely what FDA did when denying marketing authorization for the three Petitioners' menthol-flavored ENDS. *Supra* 30-31.

Accordingly, this Court should reaffirm *RJR*.

C. The Internal Memoranda Demonstrate FDA Did Not Give Petitioners Fair Notice Of The Comparative Efficacy Study Requirement Or Otherwise Account For Reliance Interests

This Court has already held FDA did not adequately explain its change in position as to applying the comparative efficacy test to menthol-flavored ENDS. As noted in *RJR*, "[t]o keep things fair, agencies must give notice of conduct the agency 'prohibits or requires' and 'cannot surprise' a party by penalizing it for 'good-faith reliance' on the agency's prior positions." 65 F.4th at 189 (quoting *Christopher v. SmithKline Beecham Corp.*, 567 U.S. 142, 156-57 (2012)). "[W]hen an agency changes its existing position, it…must at least display an awareness that it is changing its position and show that there are good reasons for the new policy." *Id.* (quoting *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125-26 (2016)).

Accordingly, "unexplained inconsistency in agency policy is a reason for holding an [action] to be an arbitrary and capricious change from agency practice." *Id.* at 189-90 (quoting *Encino*, 136 S. Ct. 2126). Importantly, when an agency changes course, it must also consider "alternatives that are within the ambit of the existing policy." *Id.* at 191 (quoting *DHS v. Regents of the Univ. of Cal.*, 140 S. Ct. 1891, 1913 (2020)).

As noted above, FDA represented to vape product manufacturers that it was not applying the comparative efficacy standard to menthol-flavored ENDS. In both the April 2020 guidance and September 2021 template TPL, FDA described such products as posing a relatively low risk to minors and being particularly important to adult addicted smokers looking to quit menthol, as menthol is the only characterizing flavor available in combustible cigarettes. *Supra* 12-13. The template TPL explicitly spared menthol-flavored ENDS from the comparative efficacy study requirement. *Id.* As such, this was more than FDA simply exercising enforcement discretion; rather, FDA had made a policy choice that menthol should be viewed differently. It was only later, years after the PMTAs at issue here had been filed, that FDA suddenly applied the standard to such products.

Indeed, the King and Apelberg Memos are further evidence FDA completely reversed its position on menthol-flavored ENDS in July 2022. Before the new CTP director came on-board, OS had recommended such products remain on the market

as the benefits to adult smokers may outweigh any risks to underage consumers (i.e., FDA would not subject PMTAs for menthol-flavored ENDS to the comparative efficacy study requirement). *Supra* 64-66; FDA-AmericanVapor-005684. But after Dr. King joined CTP, he quickly reversed course and ordered CTP to reject any PMTAs for menthol-flavored products that did not contain a comparative efficacy study. *Id.*; FDA-AmericanVapor-005681. These internal memoranda leave no doubt there had been a wholesale change in FDA's approach to menthol-flavored products, without adequate explanation or notice to Petitioners, or any consideration of or allowance for the company's reliance interests. *RJR*, 65 F.4th at 192 (finding FDA had "changed its position" and implemented a new policy as to menthol without justification).

To be sure, the Supreme Court in *Wages II* found FDA did not unlawfully change its position as to the comparative efficacy standard and its application to non-tobacco flavored ENDS. 145 S. Ct. at 919. But that was in reference to flavored ENDS products other than menthol (e.g., fruit-flavored ENDS). As *Wages II* did not address menthol-flavored ENDS, the Supreme Court did not have occasion to consider the King and Apelberg Memos, and in fact was careful to note FDA had treated menthol differently in the 2020 guidance vis-à-vis the comparative efficacy standard. *See Wages II*, 145 S. Ct. at 924 (FDA "telegraphed its view that dessert-, candy-, and fruit-flavored e-cigarette products are more

likely than…menthol-flavored products to appeal to the young"); (FDA observing that "youth use of mint- and fruit-flavored [e-cigarette] products is higher than that of menthol- and tobacco-flavored [e-cigarette] products"); ("FDA also relied on data that flavors like tobacco and menthol 'were preferred more by adults than youth'"); (the comparative efficacy standard was a "natural consequence" of "FDA's heightened concern with dessert, candy-, and fruit-flavored products compared to tobacco- and menthol-flavored products).

Finally, FDA failed to account for Petitioners' interests by considering alternatives to the new policy. *RJR*, 65 F.4th at 191. Indeed, as it had internally changed its approach well after Petitioners had filed their MDOs, FDA could have easily sent a deficiency letter to Petitioners requesting a comparative efficacy study. *Supra* 13-14 (FDA indicating it would issue one deficiency letter before making a marketing decision); *RJR*, 65 F.4th at 191. Alternatively, FDA could have granted marketing authorization but required post-market surveillance to ensure minors have not initiated use of Petitioners' products. 21 U.S.C. §387j(f). This would have made sense as FDA's own data show minors are not using Petitioners' products. *Supra* 46. But FDA did not consider either option.

Again, this Court should reaffirm *RJR*.

VI. This Court Should Restore Congressional Authority And Vacate Petitioners' MDOs Under the "Major Questions Doctrine"

Rather than complying with notice-and-comment requirements, FDA essentially claimed implicit authority in the PMTA provision, 21 U.S.C. §387j, to cut short all scientific reviews and instead make an industry-wide finding that non-tobacco flavored ENDS fail under the APPH standard—i.e., to institute a de facto restriction or ban on those products. But as the Supreme Court held in *West Virginia v. EPA*, courts must "presume that Congress intends to make major policy decisions itself, *not leave those decisions to agencies*." 597 U.S. 697, 723 (2022) (internal citations omitted) (emphasis added). In a concurrence, Justice Gorsuch (as did the majority) characterized this as nothing less than protecting the Constitution's separation of powers principles:

> The Constitution…placed its trust not in the hands of a few, but [in] a number of hands, so that those who make our laws would better reflect the diversity of the people they represent.…[T]he Constitution sought to ensure that any new laws would enjoy wide social acceptance, [and] profit from input by an array of different perspectives during their consideration.

Id. at 723, 737-38 (internal citations and quotations omitted). Under this "major questions doctrine," "Congress [must] speak clearly if it wishes to assign to an agency decisions of vast economic and political significance." *Id.* at 716 (internal citations and quotations omitted). Congress does not grant expansive regulatory authority through "subtle device[s]." *Id.* at 723 (internal citations and quotations

omitted). An "agency instead must point to clear congressional authorization for the power it claims." *Id.* (internal citations and quotations omitted).

In fact, the Supreme Court has already relied on the major questions doctrine to shut down a previous attempt by FDA to ban tobacco products. In *Brown & Williamson*, FDA had adopted a final rule that would have regulated tobacco products under the FDCA's stringent pre-market authorization process for medical devices, which would have required a finding that cigarettes and smokeless tobacco are "safe and effective" for their intended use before they could enter the commercial market. 529 U.S. at 136. Because these products are inherently unsafe and not intended for therapeutic benefit, however, they would not be able to satisfy such a stringent health standard.

Accordingly, the Supreme Court vacated the rule, finding that cigarettes and smokeless tobacco would be effectively banned if regulated under the FDCA, a result that would directly contravene long-standing Congressional policy to allow those products to remain in the marketplace. *Id.* at 139. After finding the tobacco industry constitutes a "significant portion of the American economy" and that it has "its own unique place in American history and society," the Court concluded "Congress could not have intended to delegate a decision of such economic and political significance to an agency in so cryptic a fashion." *Id.* at 159-60 (internal citations and quotations omitted).

In response, Congress adopted the TCA in 2009, amending the FDCA and giving FDA authority to regulate tobacco products. In doing so, Congress complied with *Brown & Williamson* and clearly delineated the extent to which FDA had authority to restrict or ban tobacco products, including those with a non-tobacco characterizing flavor. As demonstrated above, however, FDA can only restrict or ban a given flavor through the promulgation of a tobacco product standard. *Supra* 50-57. Congress confined FDA's authority because it wanted to ensure any flavor limitations would result from notice-and-comment rulemaking, whereby all stakeholders would have an opportunity to provide input and all relevant factors (e.g., economic impact on manufacturers; creation of a black-market), in addition to those under an APPH standard, would be taken into account. *Id.*

In contrast, the PMTA/APPH provision does not speak to across-the-board restrictions or bans for APPH determinations (21 U.S.C. §387j(c)(2)(A)); instead it establishes an internal, case-by-case process of evaluating each application, the very antithesis of a public notice-and-comment process. Indeed, Congress made clear the only instance in which marketing authorization may be denied as part of an industry-wide restriction or ban is where FDA has already adopted a tobacco product standard (21 U.S.C. §387j(c)(2)((D)). *Supra* 50-57. Thus, FDA cannot claim implicit authority to restrict or ban flavors in the PMTA/APPH provision.

And this is a major questions case, as it involves issues that are both politically and economically significant. As to the tobacco product industry generally, the Supreme Court already held as much in *Brown & Williamson*. 529 U.S. at 159 (noting the tobacco product industry's political history and substantial economic value). The same holds true for ENDS products in particular. Whether non-tobacco flavored ENDS should be restricted or banned, as well as the relative health risks posed by such products, have been debated for years in Congress, state legislatures, and in the public health community. For example, numerous proposed legislative measures banning flavored products at the federal[48] and state[49] levels have been considered but ultimately rejected. *See, e.g.*, *Biden v. Nebraska*, 600 U.S. 477, 503 (2023); *West Virginia*, 597 U.S. at 724-25 (both cases finding major

[48] *See*, *e.g.*, S. 3319, 115th Cong. §2 (2018); H.R. 293, 116th Cong. §301 (2019); H.R. 1498, 116th Cong. §3 (2019); H.R. 2339, 116th Cong. §103 (2019); H.R. 4425, 116th Cong. §3 (2019); S. 2519, 116th Cong. §3 (2019); S. 3174, 116th Cong. §103 (2020).

[49] S.F. 2123, 93rd Minn. Leg., 93rd Sess. (Minn. 2024); H.F. 2177, 93rd Minn. Leg., 93rd Sess. (Minn. 2024); S. 18, Vt. Gen. Assemb., 2023-2024 Sess. (Vt. 2024); S.B. 259, 2023 Gen. Assemb., 445th Sess. (Md. 2023); H.B. 6488, Conn. Gen. Assemb., 2023 Reg. Sess. (Conn. 2023); H.B. 3090 2nd Or. Leg. Assemb., 2023 Reg. Sess. (Or. 2023); H.B. 1570, 31st Haw. Leg., 2022 Reg. Sess. (Haw. 2022); H.B. 22-1064, 73rd Gen. Assemb., 2nd Sess. (Colo. 2022); S.B. 810, Fla. Leg. Reg. Sess. (Fla. 2020); S.B. 6254, 66th Wash. Leg., Reg. Sess. (Wash. 2020); L.D. 1215, 131st Me. Leg., 2nd Reg. Sess. (Me. 2020); H.B. 3, 2020 Gen. Assemb., 441st Sess. (Md. 2020); S.B. 233, 2020 Gen. Assemb., 441st Sess. (Md. 2020); H.B. 1119, Va. Gen. Assemb., 2020 Reg. Sess. (Va. 2020); 2019 Mich. Reg. 18 (October 15, 2019); 2019 Mont. Reg. 24, 37-901(Dec. 24, 2019).

questions, in part, where Congress had rejected proposed legislation that would have granted an agency its claimed authority); *see also Texas v. NRC*, 78 F.4th 827, 844 (5th Cir. 2023) (finding radioactive waste disposal to be a major question because it "has been hotly politically contested for over a half century"), *rev'd and remanded on other grounds* 605 U.S. 665 (2025). Just a quick search of PubMed, a search engine for biomedical and life-science literature maintained by the National Institutes of Health, using terms such as "vape," "electronic cigarette," "vaping," and "e-cigarette," also yields research and scientific articles numbering in the tens of thousands over the last decade.[50]

Moreover, recent economic indicators demonstrate the devastating impact continued restrictions or an outright ban could have on the ENDS industry. ECigIntelligence, a well-known provider of market and regulatory data focused on the e-cigarette and vapor sectors, estimates the 2025 total ENDS market value to be $14.5 billion dollars, with a U.S. consumer base of 19 million adult (21+) consumers. ADD016. *See, e.g., King v. Burwell*, 576 U.S. 473, 485-86 (2015) (applying major questions doctrine where Internal Revenue Service rule governing tax credits under the Patient Protection and Affordable Care Act would involve "billions of dollars in spending each year" and "affect[] the price of health

[50] *See* https://tinyurl.com/4e56vywe.

insurance for millions of people"). And as suggested by the consumer surveys summarized above, a large segment of those consumers will have relied on non-tobacco flavored ENDS to move away from more dangerous combustible cigarettes. At present, there are also approximately 5,500 vape shops across the U.S., which are typically family-owned small businesses, thus tens of thousands of jobs are at risk of disappearing under FDA's approach. ADD016. *See, e.g.*, *West Virginia*, 597 U.S. at 714 (EPA CAA rule would "entail billions of dollars in compliance costs (to be paid in the form of higher energy prices)…and eliminate tens of thousands of jobs across various sectors").

Consequently, it is unlikely FDA—after having addressed *Brown & Williamson* by explicitly setting forth in one TCA provision the circumstances under which the agency could restrict or ban non-tobacco flavored ENDS—would have then left it to FDA's complete discretion in another statutory provision to abandon full PMTA reviews and instead impose a de facto restriction or ban on these products via the comparative efficacy standard. And again, FDA did not give individualized, case-by-case consideration to each application, which coincidently resulted in MDOs for almost every non-tobacco flavored ENDS. That is plainly evident from the fact that: (i) FDA did not conduct anything resembling a full scientific review for these PMTAs; (ii) no product with a characterizing flavor other than tobacco or menthol has received market authorization; and (iii) only a

miniscule number of menthol products (0.0006%) have been approved for the marketplace. *Supra* 3-35. FDA cannot reasonably argue otherwise.[51]

Accordingly, by vacating and remanding Petitioners' MDOs, this Court will confirm Congress's own decision, as set forth in the TCA, regarding the limited scope of FDA's authority to restrict or ban non-tobacco flavored ENDS, and ensure unelected agency personnel do not rewrite the law. *See Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 328 (2014) (noting "core administrative-law principle that an agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate").

VII. FDA Arbitrarily And Capriciously Designated Vertigo Vapor's And Elite's Menthol-Flavored Products As Having A Characterizing Flavor Other Than Menthol

On September 4, 2020, Vertigo submitted its PMTA for various non-tobacco flavored ENDS products, including the Glacier Mint bottled e-liquid products. The PMTA explicitly listed "menthol" as the "characterizing flavor" for those products. FDA-VertigoVaporPMTA-000017-19. In the PMTA, Vertigo also provided a list of ingredients, which listed "Menthol" and "INW Mint" (*see* confidential master file at MF0000971). FDA-VertigoVaporPMTA-0021-23. Consistent with those designations made by Vertigo, on September 25, 2020, FDA issued an Acceptance

[51] *Wages II* does not alter this conclusion. The Supreme Court explicitly noted it was not addressing *amici* arguments regarding the major questions doctrine. 145 S. Ct. at 916 n.3.

letter for Vertigo's PMTA. In Appendix A, FDA listed the "Characterizing Flavor" for Glacier Mint ENDS as "Menthol." FDA-00001-13. And on October 19, 2020, FDA issued a Filing letter to Vertigo, in which Appendix A not surprisingly identified the "Characterizing Flavor" for Glacier Mint ENDS as "Menthol." FDA-000015-27.

On September 9, 2021, FDA issued its first MDO for Vertigo ENDS, which covered all of the non-tobacco, non-menthol flavored products (i.e., the MDO did not include the Glacier Mint ENDS). FDA-000029-33. The TPL supporting that MDO stated FDA would assess Vertigo's menthol-flavored products separately. FDA-00084 n.ii. The TPL noted "when it comes to evaluating the risks and benefits of a marketing authorization, the assessment for menthol ENDS, as compared to other non-tobacco-flavored ENDS, raises unique considerations. *Id.* Indeed, that TPL is consistent with the 2021 template TPL which, as discussed above, explicitly treated non-tobacco flavored and menthol-flavored products differently for review purposes. *Supra* 12-13.[52]

Similarly, on September 9, 2020, Elite submitted a PMTA for various ENDS, including two Saltbae50 Ice Wintergreen bottled e-liquid products. The PMTA,

[52] This is also consistent with the April 2020 enforcement guidance which distinguished the relatively lower risks to minors and increased benefits to adult smokers of menthol-flavored ENDS from other flavors. *Supra* 12-13.

including accompanying Environmental Assessments, specifically identified the characterizing flavor for those ENDS as "menthol." *See, e.g.*, FDA-EliteBrothersPMTA-0021-22. The PMTA also included a list of ingredients which referenced both "Menthol" and "Wintergreen." *See*, *e.g.*, FDA-EliteBrothersPMTA-0023. Consistent with those designations, on November 24, 2020, FDA issued an Acceptance letter for Elite's PMTA. FDA-EliteBrothers-000001-14. In Appendix A, FDA listed the "Characterizing Flavor" of the two Ice Wintergreen products as "Menthol." FDA-EliteBrothers-000006. And on August 13, 2021, FDA issued a Filing letter. FDA-EliteBrothers-000015-30. Once again, in Appendix A, FDA identified the "Characterizing Flavor" as "Menthol." FDA-EliteBrothers-000021.

Just as it did with Vertigo, FDA issued its first MDO for Elite's ENDS on September 15, 2021, which covered all of the company's non-tobacco flavored, non-menthol flavored products (i.e., the MDO did not include the Ice Wintergreen ENDS). As with Vertigo, the TPL supporting the MDO stated FDA would address Elite's menthol-flavored products separately, ADD0018-19 n.ii, and reiterated the point that menthol ENDS raise "unique" considerations, *id.*

FDA then issued on May 30, 2024 and February 3, 2025, the MDOs challenged in this case for Vertigo and Elite, respectively, which denied marketing authorization for Vertigo's ten Glacier Mint ENDS products and Elite's two Ice

Wintergreen products. FDA-000034-39; FDA-EliteBrothers-000031-35. In other words, FDA had determined the Glacier Mint and Ice Wintergreen products had a characterizing flavor of menthol and thus had held off from including them in the prior MDOs. And with the more recent MDOs, FDA had now addressed "separately" Vertigo's and Elite's menthol-flavored products.

But then, in Appendix A of the second MDOs in which marketing authorization was denied for Vertigo's and Elite's menthol ENDS, FDA identified the "Flavored CF" or characterizing flavor of Vertigo's ENDS as "Mint" and Elite's products as "Ice Wintergreen." FDA-000037-39; FDA-EliteBrothers-000034. For both manufacturers, the record includes internal memorandums further considering the characterizing flavors of these products. FDA-000113-119; FDA-EliteBrothers-000069-74. While FDA claims to have conducted a "totality of circumstances" analysis in which it considered Vertigo's and Elite's descriptions of the characterizing flavor in each of their PMTAs, the record indicates otherwise. Neither memo mentions the actual ingredient lists provided by both companies that specifically identify "menthol" as an ingredient. As such, FDA failed to consider highly relevant evidence and explain its decision. *Supra* 45-46.[53] And this is

[53] These memos also raise other concerns. For example, it is well known the chemical ingredient "menthol" provides "cooling properties." Merriam-Webster Dictionary, https://tinyurl.com/4pfkn9jw. Yet, in the memos, FDA claims the terms "Glacier" and "Ice" are "ambiguous," as well as labeling describing Vertigo's products as a "Cool, refreshing delight." Clearly, those words and phrases are

critical. As demonstrated above, the lawfulness of the MDOs issued by FDA for menthol-flavored ENDS raise additional concerns under the TCA and APA. *Supra* 62-71. Thus, Vertigo's and Elite's MDOs must be vacated on these grounds alone.

VIII. Contrary To The TCA, FDA Unlawfully Denied Marketing Authorization For Zero-Nicotine Products

The TCA only applies to products derived from tobacco and/or that contain nicotine from any source, or that are otherwise a "component" or "part" of a tobacco product. 21 U.S.C. §321(rr). Four Petitioners—Vertigo, White Cloud, Vapermate, and American Vapor—had MDOs issued for zero-nicotine options that are not made or derived from tobacco.[54] Moreover, as FDA stated in the June 2019 PMTA guidance, zero-nicotine ENDS that are "not intended or reasonably expected to be mixed with liquid nicotine or materials made or derived from tobacco" are not subject to the TCA. FDA-003972-73. Petitioners did not intend for its zero-nicotine products to be mixed with nicotine or tobacco, and FDA did not argue or present evidence in the record to the contrary.

Instead, both Vertigo and White Cloud explained in their respective PMTAs why the zero-nicotine options were included in the applications. The zero-nicotine

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referencing the "cooling" sensation provided by the menthol ingredients, thus lending additional evidence that these products are menthol-flavored.

[54] FDA-000037-39; FDA-WHITECLOUD-000083-87; FDA-VAPERMATE-000098-101; FDA-AmericanVapor-000052-53.

products were used as part of an HPHC testing bracketing approach requested by FDA where the lowest and highest nicotine versions for each product are tested. FDA-VertigoVapor-0020; FDA-WHITECLOUDPMTA-0029. Moreover, as to all four Petitioners, it is clear from each manufacturer's complete flavor offerings that a consumer wishing to use a particular flavored product with nicotine may simply purchase one of Petitioners' nicotine options.[55] For instance, Vapermate explained the "attached products were very thoughtfully created to allow our customers a wide variety of flavors in with a range of nicotine that allows them to use both non-nicotine and nicotine liquids in tandem to slowly decrease their nicotine level in small enough increments that they don't notice." FDA-VAPERMATEPMTA-0001. In other words, the 0.0% option is offered to help adult smokers transition away from nicotine altogether. Not surprisingly, neither the MDOs nor the underlying TPLs explained how Petitioners intended for its customers to add nicotine to their products, and FDA cannot do so now. *See Chenery II*, 332 U.S. at 196 (prohibiting agency post-hoc rationalization).

Accordingly, the MDOs, to the extent they apply to zero-nicotine ENDS, should be vacated.

[55] *See supra* note 54 (MDOs listing non-tobacco flavored ENDS products each with a range of nicotine concentrations starting at 0.0%).

CONCLUSION

This Court should grant the Petitions for Review, and vacate and remand the MDOs for further agency proceedings.

Dated: September 30, 2025

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CERTIFICATE OF SERVICE

I hereby certify that on September 30, 2025, a true and correct copy of the foregoing was filed via the Court's CM/ECF system and served via electronic filing upon all counsel of record in this case.

/s Eric P. Gotting
Eric P. Gotting

CERTIFICATE OF COMPLIANCE

I hereby certify the foregoing complies with the length limitations of Federal Rule of Appellate Procedure ("Rule") 27(d)(2)(A) and this Court's September 19, 2025 order granting an extension of words to Petitioners (24-60304; Doc. 110) because it is 17,957 words, excluding the parts that are exempted under Rule 32(f). It complies with the typeface and type-style requirements of Rule 32(a)(5) and Rule 32(a)(6) because it is printed in 14-point Times New Roman font.

/s Eric P. Gotting
Eric P. Gotting