FDA U.S. FOOD & DRUG ADMINISTRATION

Technical Project Lead (TPL) Review: SE0015412

SE0015412: Copenhagen Long Cut Reserve	
Package Type	Plastic Can and Metal Lid
Package Quantity	34.02 grams
Tobacco Cut Size	(b) (4) Cuts Per Inch (CPI)
Characterizing Flavor	None
Attributes of SE Report	
Applicant	U.S. Smokeless Tobacco Company LLC
Report Type	Regular
Product Category	Smokeless Tobacco Product
Product Sub-Category	Loose, Moist Snuff
Recommendation	
Issue Substantially Equivalent (SE) order.	

Technical Project Lead (TPL):

Digitally signed by Charles Feng -S
Date: 2020.09.29 10:22:05 -04'00'

Charles Feng, Ph.D.
Chemistry Branch Chief
Division of Product Science

Signatory Decision:

☒ Concur with TPL recommendation and basis of recommendation

☐ Concur with TPL recommendation with additional comments (see separate memo)

☐ Do not concur with TPL recommendation (see separate memo)

Todd L. Cecil -S
Digitally signed by Todd L. Cecil -S
Date: 2020.09.29 10:53:09 -04'00'

Todd L. Cecil, Ph.D.
Deputy Director
Office of Science

TABLE OF CONTENTS

1. BACKGROUND

1.1. PREDICATE TOBACCO PRODUCTS

The applicant submitted the following predicate tobacco product:

SE0015412: Copenhagen Long Cut Reserve	
Product Name	Copenhagen Long Cut Smooth Wintergreen
Package Type	Plastic Can and Metal Lid
Package Quantity	34.02 grams
Tobacco Cut Size	(b) (4) CPI
Characterizing Flavor	Wintergreen

The predicate tobacco product is a loose moist snuff smokeless tobacco product manufactured by the applicant.

1.2. REGULATORY ACTIVITY RELATED TO THIS REVIEW

On August 26, 2019, FDA received one SE Report from Altria Client Services LLC, on behalf of U.S. Smokeless Tobacco Company LLC. On August 30, 2019, FDA issued an Acknowledgment letter to the applicant. On November 01, 2019, FDA issued a Deficiency letter to the applicant. On December 18, 2019, FDA received an amendment containing a response to the Deficiency letter (SE0015613). On February 20, 2020, FDA issued a second Deficiency letter. On April 30, 2020, FDA issued an Extension Granted letter. On July 02, 2020, FDA received an amendment containing a response to the second Deficiency letter (SE0016777).

Product Name	SE Report	Amendments
Copenhagen Long Cut Reserve	SE0015412	SE0015613 SE0016777

1.3. SCOPE OF REVIEW

This review captures all regulatory, compliance, and scientific reviews completed for this SE Report.

2. REGULATORY REVIEW

A regulatory review was completed by Pin Zhang on August 30, 2019. The review concludes that the SE Report is administratively complete.

3. COMPLIANCE REVIEW

The predicate tobacco product in SE0015412 was determined to be substantially equivalent by FDA under SE0014987. Therefore, the predicate tobacco product is an eligible predicate tobacco product.

The Office of Compliance and Enforcement (OCE) completed a review to determine whether the new tobacco product is in compliance with the Federal Food, Drug, and Cosmetic Act (FD&C Act) (see section 910(a)(2)(A)(i)(II) of the FD&C Act). The OCE review dated September 3, 2020, concludes that the new tobacco product is in compliance with the FD&C Act.

4. SCIENTIFIC REVIEW

Scientific reviews were completed by the Office of Science (OS) for the following disciplines:

4.1. CHEMISTRY

A chemistry review was completed by Abdur-Rafay Shareef on October 15, 2019.

The chemistry review concludes that the new tobacco product has different characteristics related to product chemistry compared to the predicate tobacco product, but the differences do not cause the new tobacco product to raise different questions of public health. The review identified the following differences:

- Lower amount (0.48% – 0.56%) of (b) (4), and total tobacco
- Addition of flavor ingredients including (b) (4), (b) (4), and (b) (4)
- Increase in (b) (4)

SE0015412 indicated a slight reduction of total tobacco and all tobacco blend components in the new tobacco product compared to the predicate tobacco product. Specifically, total tobacco was lower by 0.53%, and the individual types of tobacco (i.e., (b) (4), (b) (4) tobacco) in the new tobacco product were also lower by 0.48 – 0.55%. The lower amounts of tobaccos are not expected to result in higher harmful and potentially harmful constituent (HPHC) yields. Several flavor ingredients were added to the new tobacco product (i.e., (b) (4), (b) (4)) in the quantities varied from (b) (4) mg/g to (b) (4) mg/g. In addition, the quantity of (b) (4) increased by (b) (4) mg/g in the new tobacco product. The evaluation of these flavor ingredients is deferred to toxicology. The applicant submitted HPHC data using acceptable analytical methods. The data for nicotine (free and total), cadmium, arsenic, benzo[a]pyrene, acetaldehyde, formaldehyde, NNN, and NNN are statistically equivalent[1] between the new and predicate tobacco products. Finally, the applicant submitted nicotine dissolution data that indicated similarity between the new and predicate tobacco products.

Therefore, the differences in characteristics between the new and predicate tobacco product do not cause the new tobacco product to raise different questions of public health from a chemistry perspective.

4.2. ENGINEERING

[1] Evaluated using a two one-sided t-test (TOST).

An engineering review was completed by Ryan Andress on October 09, 2019.

The engineering review did not identify any differences in characteristics between the new and predicate tobacco product that could cause the new tobacco product to raise different questions of public health from an engineering perspective.

4.3. MICROBIOLOGY

A microbiology review was completed by David Craft on October 09, 2019.

The microbiology review concludes that the new tobacco product has different characteristics related to product microbiology compared to the predicate tobacco product, but the differences do not cause the new tobacco product to raise different questions of public health. The review identified the following differences:

- 0.6% decrease in (b) (4) tobacco
- 0.6% reduction of (b) (4) a preservative

The applicant provided stability testing data (pH, moisture, a_w, nitrate, nitrite, NNN, NNK, TSNA, TAMC, and TYMC) measured over the complete storage duration (beginning, middle, and end) of the new and predicate tobacco products. From a microbiology perspective, the differences between the new and predicate tobacco products are not of concern based on the ≤3% changes in pH, OV%, and a_w of the new tobacco product as compared to the predicate tobacco product throughout storage. These changes were further substantiated by the supporting decreases in TAMC (≤19%), and undetectable TYMC (≤5 cfu/g) over the storage duration of the new tobacco product. The NNN, NNK, and total TSNA content of the new tobacco product showed changes (≤3%) when compared to the predicate tobacco product throughout storage. In addition, the new tobacco product showed ≤4% changes in NNN, NNK, and total TSNA content over the complete storage duration.

Therefore, the differences in characteristics between the new and predicate tobacco product do not cause the new tobacco product to raise different questions of public health from a microbiology perspective.

4.4. TOXICOLOGY

Toxicology reviews were completed by Mamata De on October 15, 2019 and August 11, 2020 and by Sheila Healy on February 05, 2020.

The final toxicology review concludes that the new tobacco product has different characteristics related to product toxicology compared to the predicate tobacco product, but the differences do not cause the new tobacco product to raise different questions of public health. The review identified the following differences:

- Addition of flavor ingredients including (b) (4), (b) (4)
- Increase in (b) (4)

For (b) (4), and (b) (4) estimated exposure to these five flavor ingredients from consumption of the new product was determined to be below the average daily intake (ADI) values established by the Joint FAO/WHO Expert Committee on Food Additives (JECFA). For (b) (4), there was an initial toxicological concern that this complex ingredient may contain furfural. However, the applicant provided evidence that (b) (4) does not contain furfural. The toxicology review also raised concern about another complex flavor ingredient, (b) (4), because it may contain (b) (4), a natural sub-ingredient of (b) (4) for its potential carcinogenicity. The toxicology reviewer conducted a peer-reviewed literature search and identified a recent publication that reported (b) (4) to contain 1.8% (b) (4). Based on the 1.8% (b) (4) content in (b) (4), the exposure level of (b) (4) from the new tobacco product was determined to be below the acceptable daily dose recommended by European Medicine Agency (EMA).

Therefore, the differences in characteristics between the new and predicate tobacco product do not cause the new tobacco product to raise different questions of public health from a toxicology perspective.

5. ENVIRONMENTAL DECISION

Environmental reviews were completed by Rudaina Alrefai-Kirkpatrick on October 16, 2019 and January 17, 2020 and by Susana Addo Ntim on July 27, 2020.

A finding of no significant impact (FONSI) was signed by Luis Valerio Jr., Ph.D., ATS on August 07, 2020. The FONSI was supported by an environmental assessment prepared by FDA on August 07, 2020.

6. CONCLUSION AND RECOMMENDATION

The following are the key differences in characteristics between the new and predicate tobacco product:

- Lower amount (0.48% – 0.56%) of (b) (4), and total tobacco
- Addition of flavor ingredients including (b) (4), (b) (4), and (b) (4)
- Increase in (b) (4)
- 0.6% reduction of (b) (4), a preservative

The applicant has demonstrated that these differences in characteristics do not cause the new tobacco product to raise different questions of public health. The lower amounts of tobaccos do not result in higher HPHC yields. This is supported by testing data for nicotine (free and total), cadmium, arsenic, benzo[a]pyrene, acetaldehyde, formaldehyde, NNN, and NNN, which are statistically equivalent between the new and predicate tobacco products. Several flavor ingredients are added or increased, however, the toxicology review determines that the estimated exposures to these flavor ingredients from consumption of the new tobacco product are below the ADI values

established by JECFA or EMA. Furthermore, the new and predicate tobacco products demonstrate similar stability over the storage time. Therefore, the differences in characteristics between the new and predicate tobacco product do not cause the new tobacco product to raise different questions of public health.

The predicate tobacco product was previously determined to be substantially equivalent by FDA under SE0014987.

Where an applicant supports a showing of SE by comparing the new tobacco product to a tobacco product that FDA previously found SE, in order to issue an SE order, FDA must find that the new tobacco product is substantially equivalent to a tobacco product commercially marketed in the United States as of February 15, 2007 (see section 910(a)(2)(A)(i)(I) of the FD&C Act).

The predicate tobacco product in SE0015412 was previously determined to be substantially equivalent by FDA under SE0014987. Additionally, the predicate tobacco product in SE0014987 was in turn, previously determined to be substantially equivalent by FDA under SE0014132. Comparison of the new tobacco product to the grandfathered tobacco product (Rooster Long Cut Wintergreen in SE0014132) reveals that the new tobacco product has the following differences in characteristics from Rooster Long Cut Wintergreen, the grandfathered tobacco product:

- Lower amount (0.48% – 0.56%) of (b) (4), and total tobacco
- Addition of flavor ingredients including (b) (4), (b) (4), and (b) (4)
- Increase in (b) (4)
- Replacement of (b) (4) with (b) (4)
- Addition of (b) (4) mg/g)
- Addition of (b) (4) mg/g)
- Replacement of plastic lid with metal lid in container-closure system resulting in the addition of trace quantities of lid coating (Gold (b) (4) and White (b) (4) (b) (4)

The differences in characteristics listed above, other than the differences in in tobacco blend and flavor ingredients, are the same differences in characteristics identified for the new and grandfathered tobacco product in SE0014987 or SE0014132. Therefore, these differences do not cause the new tobacco product in SE0015412 to raise different questions of public health. Additionally, for the same reasons as discussed above, the differences in in tobacco blend and flavor ingredients between the new tobacco product in SE0015412 and the grandfathered tobacco product do not cause the new tobacco product to raise different questions of public health. Therefore, whether comparing the new tobacco product in SE0015412 to the predicate or grandfathered tobacco product, the new tobacco product does not raise different questions of public health.

The new tobacco product is currently in compliance with the FD&C Act. In addition, all of the scientific reviews conclude that the differences between the new and predicate tobacco product are such that the new tobacco product does not raise different questions of public health. I concur with these reviews and recommend that an SE order letters be issued.

FDA examined the environmental effects of finding this new tobacco product substantially equivalent and made a finding of no significant impact.

An SE order letter should be issued for the new tobacco product in SE0015412, as identified on the cover page of this review.