

**Technical Project Lead (TPL) Review: SE0015597 and SE0015600**

<b>SE0015597: Black &amp; Mild® Blues Wood Tip</b>	
<b>Package Type</b>	Cello
<b>Package Quantity</b>	1 Cigar
<b>Characterizing Flavor</b>	None
<b>Length</b>	126.9 mm
<b>Diameter</b>	9.57 mm
<b>Tip</b>	Wood Tip
<b>SE0015600: Black &amp; Mild® Blues</b>	
<b>Package Type</b>	Cello
<b>Package Quantity</b>	1 Cigar
<b>Characterizing Flavor</b>	None
<b>Length</b>	126.9 mm
<b>Diameter</b>	9.57 mm
<b>Tip</b>	Plastic Tip
<b>Attributes of SE Reports</b>	
<b>Applicant</b>	John Middleton Co.
<b>Report Type</b>	Regular
<b>Product Category</b>	Cigars
<b>Product Sub-Category</b>	Unfiltered, Sheet-Wrapped Cigar
<b>Recommendation</b>	
Issue Substantially Equivalent (SE) orders.	

**Technical Project Lead (TPL):**

Digitally signed by Kenneth Taylor -S  
Date: 2020.08.25 10:15:51 -04'00'

Kenneth M. Taylor, 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)

Digitally signed by Matthew R. Holman -S  
Date: 2020.08.25 13:56:29 -04'00'

Matthew R. Holman, Ph.D.  
Director  
Office of Science

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**1. BACKGROUND**

**1.1. PREDICATE TOBACCO PRODUCTS**

The applicant submitted the following predicate tobacco products:

<b>SE0015597: Black &amp; Mild® Blues Wood Tip</b>	
<b>Product Name</b>	Prince Albert Soft Cherry Vanilla
<b>Package Type</b>	Cello
<b>Package Quantity</b>	1 Cigar
<b>Characterizing Flavor</b>	Cherry Vanilla
<b>Length</b>	126.9 mm
<b>Diameter</b>	9.62 mm
<b>Tip</b>	Plastic Tip
<b>SE0015600: Black &amp; Mild® Blues</b>	
<b>Product Name</b>	Prince Albert Soft Cherry Vanilla
<b>Package Type</b>	Cello
<b>Package Quantity</b>	1 Cigar
<b>Characterizing Flavor</b>	Cherry Vanilla
<b>Length</b>	126.9 mm
<b>Diameter</b>	9.62 mm
<b>Tip</b>	Plastic Tip

The predicate tobacco products are unfiltered, sheet-wrapped cigars manufactured by the applicant.

**1.2. REGULATORY ACTIVITY RELATED TO THIS REVIEW**

On December 9, 2019, FDA received two SE Reports from John Middleton Co. On December 16, 2019, FDA issued an Acceptance letter to the applicant. On April 23, 2020, FDA issued a Deficiency letter. On June 4, 2020, FDA received the response (SE0016640) response to the Deficiency letter.

<b>Product Name</b>	<b>SE Report</b>	<b>Amendment</b>
Black & Mild® Blues Wood Tip	SE0015597	SE0016640
Black & Mild® Blues	SE0015600	

**1.3. SCOPE OF REVIEW**

This review captures all regulatory, compliance, and scientific reviews completed for these SE Reports.

## 2. REGULATORY REVIEW

Regulatory reviews were completed by Travelle Mason on December 16, 2019.

The reviews conclude that the SE Reports are administratively complete.

## 3. COMPLIANCE REVIEW

The Office of Compliance and Enforcement (OCE) completed reviews to determine whether the applicant established that the predicate tobacco product is a grandfathered product (i.e., was commercially marketed in the United States other than exclusively in test markets as of February 15, 2007). The OCE review dated January 8, 2020, concludes that the evidence submitted by the applicant is adequate to demonstrate that the predicate tobacco product is grandfathered and, therefore, an eligible predicate tobacco product.

OCE also completed reviews to determine whether the new tobacco products are in compliance with the Federal Food, Drug, and Cosmetic Act (FD&C Act), as required by section 905(j)(1)(A)(i) of the FD&C Act. The OCE reviews dated February 4, 2020 and July 30, 2020, conclude that the new tobacco products are 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

Chemistry reviews were completed by Jiu Ai on February 3, 2020, and July 22, 2020.

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

- Tobacco Blend
  - 8.2% decrease in cigar filler weight
  - 4.2% decrease in target tobacco weight
  - 2.2% decrease in (b) (4) tobacco
  - 25.8% decrease in (b) (4) tobacco
  - 10.0% decrease in (b) (4)
- Non-tobacco ingredients in cigar filler
  - 2.8% to 98% decreases in all non-tobacco ingredients
- Ingredients in cigar wrapper
  - 9.2% decrease in wrapper weight
  - 9.4% decrease in tobacco content
  - 8.5% decrease in (b) (4)

- 9.0% decrease in (b) (4)
  - 9.2-9.7% decreases in other ingredients
  - Addition of (b) (4) mg/cigar of (b) (4)
  - Removal of (b) (4) mg/cigar of (b) (4)
- Ingredients in cigar binder
    - 11.2% decrease in binder weight
    - 11.3% decrease in tobacco content
    - 11.1% decrease in (b) (4)
    - 11.0% decrease in (b) (4)
    - 33.1% increase in (b) (4)
    - 9.2-9.7% decreases in other ingredients
    - Addition of (b) (4) mg/cigar of (b) (4)
    - Removal of (b) (4) mg/cigar of (b) (4)
    - Removal of (b) (4)
  - Ingredients in seam adhesive
    - 9.7% decrease in (b) (4)
  - Multiple changes in tobacco cut size
  - Wood tip (SE0015597) comprised of:
    - (b) (4)
    - (b) (4)
    - (b) (4)
  - Plastic tip (SE0015600)
    - 1.0% decrease in (b) (4)
    - Addition of (b) (4)

The new tobacco products are slightly smaller than the predicate tobacco product, with general decreases in tobacco and either decreases or removal of non-tobacco ingredients. Such changes are typically favorable because they reduce smoke constituents that have toxicological significance. (b) (4) replaces (b) (4) (both preservatives) and (b) (4) is increased. Smoke chemistry is not anticipated to be affected by either of these changes because the total (b) (4) quantity (b) (4) mg/cigar) is less than 0.1% of the tobacco rod weight of the cigar and the total amount of (b) (4) is (b) (4) mg/cigar lower in the new tobacco products compared to the predicate tobacco product. The lower amount of (b) (4) in the new tobacco products is not expected to increase HPHC smoke yields, such as formaldehyde and acrolein. As the cigar tips are a non-combusted component, smoke chemistry is also not anticipated to be altered by this change. With the exception nicotine, on a unit of mass per gram of tobacco rod basis, arsenic, cadmium, NNK and NNN are analytically equivalent in the new tobacco products. Nicotine is increased 7-12% but does not cause concerns from a behavioral and clinical pharmacology perspective. As a result, the harmful and potentially harmful constituents (HPHC) data submitted for tobacco filler demonstrates that the reduced size and amount of tobacco in the new products do not raise different questions of public health. The engineering review identified multiple changes in tobacco cut size, which could cause elevation in tar, nicotine and carbon monoxide (TNCO) smoke yields.

The applicant provided TNCO yields for the new and predicate tobacco products. The applicant also proposed that there are important analytical differences (IAD) in TNCO measurements for tipped cigars with data of measured TNCO yields for 154 testing events to account for the large variability inherent with cigars. The proposed IADs were appropriately calculated and TOST<sup>1</sup> analysis also show that the reported TNCO values for the new tobacco products are either analytically equivalent to or lower than those of the predicate tobacco product. Therefore, tobacco cut size differences between the new and predicate tobacco products do not cause the new tobacco products to raise different questions of public health. Finally, as non-combusted components, the changes in the cigar tips of the new tobacco products will not affect smoke constituents and do not cause concerns.

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

#### **4.2. ENGINEERING**

An engineering review was completed by Jimin Kim on January 23, 2020.

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

- 8% decrease in tobacco filler mass
- 14% decrease in wrapper moisture
- 23% decrease in binder moisture
- Multiple changes in tobacco cut size (CPI)

Decreases in tobacco mass and binder/wrapper moisture are all generally associated with a reduction in TNCO yields and are favorable changes. However, the effect of cumulative changes in tobacco cut sizes on TNCO are unknown. To address the cut size differences, the applicant provided TNCO information for the new and predicate tobacco products, which is evaluated by the chemistry review (See section 4.1 of this review).

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

#### **4.3. MICROBIOLOGY**

A microbiology review was completed by Wen Lin on January 28, 2020.

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<sup>1</sup> Two One-Sided T-test (TOST) which is a statistical tool that calculates important analytical differences using the Horwitz-Thompson equation. The mean range of a TOST analysis is a measure of statistical probability that differences in a mean range of tested values are analytically significant. An equivalence margin at a 75% confidence interval reduces the number of inconclusive results, which default to be considered as not analytically equivalent.

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

- 3% decrease in (b) (4), 22% lower (b) (4) 20% lower (b) (4), and 4% lower (b) (4) (all humectants)
- Removal of (b) (4) from the tobacco filler
- Replacement of (b) (4) with (b) (4) as a preservative in the wrapper and binder
- 10% decrease in (b) (4) in the seam adhesive

All new and corresponding predicate tobacco products differ in humectant and preservative content, which could potentially affect microbial stability of the products over the storage time of the products. The applicant did not provide stability data, but they provided moisture content (OV%), NNN and NNK content of the finished new and predicate tobacco products. The moisture content (<16%) decrease in OV% ( $\leq 7\%$ ) and analytically equivalent NNN and NNK quantities demonstrate that the differences in humectants and preservatives in the new tobacco products are not a concern.

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

#### 4.4. TOXICOLOGY

A toxicology review was completed by Daniel Beury on January 30, 2020.

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

- Decreases in non-tobacco ingredient additives
- Decreases in target weights for the binder, wrapper, and seam adhesive, which results in concomitant decreases of the respective ingredients
- Substitution of (b) (4) and (b) (4) for (b) (4) and (b) (4) (b) (4), respectively
- Decreases in tobacco rod weight and the overall tobacco blends
- Change from plastic to wood tip (SE0015597)
- Addition of artificial sweeteners (b) (4) and (b) (4) (SE0015597) or just (b) (4) (SE0015600) to the cigar tip

The change in ingredient levels do not present toxicological concerns because they are either reduced, do not affect HPHCs, or, in the cases of the artificial sweeteners, will be consumed in amounts that are less than those established by the Joint FAO/WHO Expert Committee on

Food Additives Acceptable Daily Intake (JECFA ADI).

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

## 5. ENVIRONMENTAL DECISION

Environmental reviews were completed by William Brenner on January 23, 2020 and July 14, 2020.

A finding of no significant impact (FONSI) was signed by Luis G. Valerio Jr., Ph.D., on July 20, 2020. The FONSI was supported by an environmental assessment prepared by FDA on July 20, 2020.

## 6. CONCLUSION AND RECOMMENDATION

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

- Tobacco Blend
  - 8.2% decrease in cigar filler weight
  - 4.2% decrease in target tobacco weight
  - 2.2% decrease in (b) (4) tobacco
  - 25.8% decrease in (b) (4) tobacco
  - 10.0% decrease in (b) (4)
- Non-tobacco ingredients in cigar filler
  - 2.8% to 98% decreases in all non-tobacco ingredients
  - Removal of (b) (4)
- Ingredients in cigar wrapper
  - 9.2% decrease in wrapper weight
  - 9.4% decrease in tobacco content
  - 8.5% decrease in (b) (4)
  - 9.0% decrease in (b) (4)
  - 9.2-9.7% decreases in other ingredients
  - Addition of (b) (4) mg/cigar of (b) (4)
  - Removal of (b) (4) mg/cigar of (b) (4)
- Ingredients in cigar binder
  - 11.2% decrease in binder weight
  - 11.3% decrease in tobacco content
  - 11.1% decrease in (b) (4)
  - 11.0% decrease in (b) (4)
  - 33.1% increase in (b) (4)
  - 9.2-9.7% decreases in other ingredients
  - Addition of (b) (4) mg/cigar of (b) (4)
  - Removal of (b) (4) mg/cigar of (b) (4)

- Removal of (b) (4)
- Ingredients in seam adhesive
  - 9.7% decrease in (b) (4)
  - 10% decrease in (b) (4)
- Multiple changes in tobacco cut size
- Wood tip (SE0015597) comprised of:
  - (b) (4)
  - (b) (4)
  - Addition of (b) (4) and (b) (4)
- Plastic tip (SE0015600)
  - 1.0% decrease in (b) (4)
  - Addition of (b) (4)
  - Addition of (b) (4)
- 3% decrease in (b) (4), 22% lower (b) (4), 20% lower (b) (4), and 4% lower (b) (4) (all humectants)

The applicant has demonstrated that these differences in characteristics do not cause the new tobacco products to raise different questions of public health. Decreases in tobacco and non-tobacco ingredient additives will not adversely affect smoke chemistry because less material is combusted. Similarly, the changes to the cigar tips are not a concern since they are non-combusted components. The differences in humectants, preservatives, and tobacco blend (increase in (b) (4) tobacco) can affect microbial activity and related HPHCs like NNN and NNK. However, these HPHCs are analytically equivalent. Similarly, smoke TNCO values are either less than or analytically equivalent, which demonstrates that the differences in the tobacco cut sizes of the new tobacco products are not a concern. The use of (b) (4) on the cigar tips is not a concern as exposure via dermal and oral routes are less than JECFA ADI established guidelines. Therefore, the differences in characteristics between the new and predicate products do not cause the new tobacco products to raise different questions of public health.

The predicate tobacco product meets statutory requirements because it was determined that it is a grandfathered tobacco product (i.e., were commercially marketed in the United States other than exclusively in test markets as of February 15, 2007).

The new tobacco products are 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 products are such that the new tobacco products do not raise different questions of public health. I concur with these reviews and recommend that SE order letters be issued.

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

SE order letters should be issued for the new tobacco products in SE0015597 and SE0015600, as identified on the cover page of this review.