



<b>SE0015689: Marlboro Black Label Box</b>	
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	14%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	Tipping Paper 1
<b>SE0015690: Marlboro Red Label 100's Box</b>	
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	98.5 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	20%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	None
<b>SE0015691: Merit Blue Pack 100's Box</b>	
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	98.5 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	55%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	None
<b>SE0015692: Marlboro Red Label Box</b>	
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	20%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	None



**Technical Project Lead (TPL):**

Digitally signed by Jeannie H. Jeong-im -S  
Date: 2020.08.07 11:39:27 -04'00'

Jeannie Jeong-Im, 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: 2020.08.07 12:15:08 -04'00'

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

**TABLE OF CONTENTS**

**1. BACKGROUND..... 6**

    1.1. PREDICATE TOBACCO PRODUCTS ..... 6

    1.2. REGULATORY ACTIVITY RELATED TO THIS REVIEW ..... 9

    1.3. SCOPE OF REVIEW ..... 9

**2. REGULATORY REVIEW ..... 9**

**3. COMPLIANCE REVIEW ..... 9**

**4. SCIENTIFIC REVIEW .....10**

    4.1. CHEMISTRY .....10

    4.2. ENGINEERING .....11

    4.3. TOXICOLOGY .....12

**5. ENVIRONMENTAL DECISION.....13**

**6. CONCLUSION AND RECOMMENDATION .....13**

**1. BACKGROUND**

**1.1. PREDICATE TOBACCO PRODUCTS**

The applicant submitted the following predicate tobacco products:

<b>SE0015685: Marlboro Menthol SpecialSelect Box</b>	
<b>Product Name</b>	Marlboro Menthol Special Select Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0mm
<b>Diameter<sup>1</sup></b>	7.89mm
<b>Ventilation</b>	18%
<b>Characterizing Flavor</b>	Menthol
<b>Additional Property</b>	Tipping Paper 1
<b>SE0015686: Marlboro Menthol SpecialSelect 100's Box</b>	
<b>Product Name</b>	Marlboro Menthol Special Select 100's Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	98.5 mm
<b>Diameter<sup>1</sup></b>	7.89mm
<b>Ventilation</b>	15%
<b>Characterizing Flavor</b>	Menthol
<b>Additional Property</b>	Tipping Paper 1
<b>SE0015687: Marlboro Menthol Box</b>	
<b>Product Name</b>	Marlboro Menthol Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0mm
<b>Diameter<sup>1</sup></b>	7.89mm
<b>Ventilation</b>	18%
<b>Characterizing Flavor</b>	Menthol
<b>Additional Property</b>	None

<b>SE0015688: Marlboro Menthol Black Special Blend Box</b>	
<b>Product Name</b>	Marlboro Menthol Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	21%
<b>Characterizing Flavor</b>	Menthol
<b>Additional Property</b>	None
<b>SE0015689: Marlboro Black Label Box</b>	
<b>Product Name</b>	Marlboro Black Label Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	83.0 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	14%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	Tipping Paper 1
<b>SE0015690: Marlboro Red Label 100's Box</b>	
<b>Product Name</b>	Marlboro Red Label 100's Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	98.5 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	20%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	None
<b>SE0015691: Merit Blue Pack 100's Box</b>	
<b>Product Name</b>	Merit Blue Pack 100's Box
<b>Package Type</b>	Hard Pack
<b>Package Quantity</b>	20 Cigarettes
<b>Length</b>	98.5 mm
<b>Diameter<sup>1</sup></b>	7.89 mm
<b>Ventilation</b>	55%
<b>Characterizing Flavor</b>	None
<b>Additional Property</b>	None

<b>SE0015692: Marlboro Red Label Box</b>	
Product Name	Marlboro Red Label Box
Package Type	HardPack
Package Quantity	20 Cigarettes
Length	83.0mm
Diameter <sup>1</sup>	7.89mm
Ventilation	20%
Characterizing Flavor	None
Additional Property	None
<b>SE0015693: Marlboro Menthol Special Select Box</b>	
Product Name	Marlboro Menthol Special Select Box
Package Type	HardPack
Package Quantity	20 Cigarettes
Length	83.0mm
Diameter <sup>1</sup>	7.89mm
Ventilation	18%
Characterizing Flavor	Menthol
Additional Property	Tipping Paper 2
<b>SE0015694: Marlboro Menthol Special Select 100's Box</b>	
Product Name	Marlboro Menthol Special Select 100's Box
Package Type	Hard Pack
Package Quantity	20 Cigarettes
Length	98.5mm
Diameter <sup>1</sup>	7.89mm
Ventilation	15%
Characterizing Flavor	Menthol
Additional Property	Tipping Paper 2
<b>SE0015703: Marlboro Black Label Box</b>	
Product Name	Marlboro Black Label Box
Package Type	Hard Pack
Package Quantity	20 Cigarettes
Length	83.0mm
Diameter <sup>1</sup>	7.89mm
Ventilation	14%
Characterizing Flavor	None
Additional Property	Tipping Paper 2

The predicate tobacco products are combusted, filtered cigarettes manufactured by the applicant.



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

On February 6, 2020, FDA received 11 SE Reports from Altria Client Services LLC, on behalf of Philip Morris USA Inc. On February 13, 2020, FDA issued an Acceptance letter. On April 10, 2020, FDA issued a Deficiency letter to the applicant. On May 19, 2020, FDA received an amendment containing a response to the Deficiency letter (SE0016620).

Product Name	SE Report	Amendments
Marlboro Menthol Special Select Box	SE0015685	SE0016620
Marlboro Menthol Special Select 100's Box	SE0015686	
Marlboro Menthol Box	SE0015687	
Marlboro Menthol Black Special Blend Box	SE0015688	
Marlboro BlackLabel Box	SE0015689	
Marlboro Red Label 100's Box	SE0015690	
Merit Blue Pack 100's Box	SE0015691	
Marlboro Red Label Box	SE0015692	
Marlboro Menthol Special Select Box	SE0015693	
Marlboro Menthol Special Select 100's Box	SE0015694	
Marlboro BlackLabel Box	SE0015703	

**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 Grace Kaiyuan on February 13, 2020.

The reviews conclude that the SE Reports are administratively complete.

**3. COMPLIANCE REVIEW**

The predicate tobacco products in SE0015685 – SE0015694 and SE0015703 were previously determined to be substantially equivalent by FDA as shown in the table below. Therefore, the predicate tobacco products are eligible predicate tobacco products.

SE Report	Predicate Tobacco Product	Predicate Tobacco Product Found SE Under:	SE Order Date
SE0015685	Marlboro Menthol Special Select Box	SE0014927	February 4, 2019
SE0015686	Marlboro Menthol Special Select 100's Box	SE0014930	February 4, 2019
SE0015687	Marlboro Menthol Box	SE0004297	June 6, 2018
SE0015688	Marlboro Menthol Box	SE0014280	April 19, 2018

SE Report	Predicate Tobacco Product	Predicate Tobacco Product Found SE Under:	SE Order Date
SE0015689	Marlboro Black Label Box	SE0014752	January 9, 2019
SE0015690	Marlboro Red Label 100's Box	SE0014849	February 13, 2019
SE0015691	Merit Blue Pack 100's Box	SE0014912	January 24, 2019
SE0015692	Marlboro Red Label Box	SE0014851	February 13, 2019
SE0015693	Marlboro Menthol Special Select Box	SE0014928	February 4, 2019
SE0015694	Marlboro Menthol Special Select 100's Box	SE0014926	February 4, 2019
SE0015703	Marlboro Black Label Box	SE0014913	January 24, 2019

The Office of Compliance and Enforcement (OCE) completed a review to determine whether the new tobacco products are 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 July 24, 2020, concludes 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 Melis Coraggio on March 31, 2020 and June 26, 2020.

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

- Ingredients
  - (b) (4)
    - SE0015685: ↑ 86% (b) (4) mg/cigarette)
    - SE0015686: ↑ 100% (b) (4) mg/cigarette)
    - SE0015691: ↑ 96% (b) (4) mg/cigarette)
    - SE0015693: ↑ 86% (b) (4) mg/cigarette)
    - SE0015694: ↑ 100% (b) (4) mg/cigarette)
  - (b) (4) in Bands
    - SE0015685: ↑ 338% (b) (4) mg/cigarette)
    - SE0015686: ↑ 335% (b) (4) mg/cigarette)
    - SE0015691: ↑ 493% (b) (4) mg/cigarette)
    - SE0015693: ↑ 338% (b) (4) mg/cigarette)
    - SE0015694: ↑ 335% (b) (4) mg/cigarette)
  - (b) (4) in Base Paper
    - SE0015685: ↓ 2% (b) (4) mg/cigarette)
    - SE0015693: ↓ 2% (b) (4) mg/cigarette)
    - SE0015686: ↓ 16% (b) (4) mg/cigarette)

- SE0015694: ↓.16% (b)(4) mg/cigarette)
    - SE0015691: ↑0.3% (b)(4) mg/cigarette)
  - (b)(4)
    - SE0015685: ↑ (b)(4) mg/cigarette
    - SE0015693: ↑ (b)(4) mg/cigarette
    - SE0015686: ↑ (b)(4) mg/cigarette
    - SE0015694: ↑ (b)(4) mg/cigarette
    - SE0015691: ↑ (b)(4) mg/cigarette
  - (b)(4)
    - SE0015685: ↑ (b)(4) mg/cigarette
    - SE0015686: ↑ (b)(4) mg/cigarette
    - SE0015691: ↑ (b)(4) mg/cigarette
    - SE0015693: ↑ (b)(4) mg/cigarette
    - SE0015694: ↑ (b)(4) mg/cigarette
  - (b)(4)
    - SE0015685: ↑3233% (b)(4) mg/cigarette)
- Harmful and Potentially Harmful Constituents (HPHCs)
  - 1,3,-butadiene not analytically equivalent (HCl)
    - SE0015686, SE0015694: ↓.20% (24.8 µg/cigarette)
  - Formaldehyde not analytically equivalent (ISO)
    - SE0015686, SE0015694: ↑18% (7.1 µg/cigarette)

SE0015685, SE0015687-SE0015690, SE0015692-SE0015693, and SE0015703, there was an addition of a defoamer to the new tobacco products. The applicant manufactured test cigarettes with and without (b)(4) and demonstrated through HPHC yields that the addition or deletion of the (b)(4) does not cause the new products to raise different questions of public health. The applicant reported yields of tobacco specific nitrosamines (NNN, NNK), aromatic amines (4-aminobiphenyl, 1-aminonaphthalene, 2-aminonaphthalene), carbonyls (acetaldehyde, acrolein, crotonaldehyde, formaldehyde), hydrocarbons (1,3-butadiene, isoprene, benzene, toluene), acrylonitrile, ammonia, benzo[a]pyrene, tar, nicotine, and carbon monoxide in mainstream smoke. SE0015686 and SE0015694 formaldehyde yields under the ISO smoking regimen were determined to be not equivalent according to TOST analysis<sup>2</sup> and were 18% (7.1 µg/cigarette) higher in the new tobacco products than in the corresponding predicate tobacco products. Additionally, 1,3-butadiene yields under the HCl smoking regimen were determined to be not equivalent but were 20% (24.8 µg/cigarette) lower in the new tobacco products than the corresponding predicate tobacco products. These HPHC differences were deferred to the toxicology reviewer. Therefore, the differences in characteristics between the new and corresponding 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 Rashele Moore on March 26, 2020.

<sup>2</sup> Two One-Sided T-test (TOST) is a statistical tool that calculates important analytical differences (IADs) using the Horwitz-Thompson equation.

The engineering review did not identify any differences in characteristics, besides minor changes in the cigarette paper weight, between the new and corresponding predicate tobacco products that could cause the new tobacco products to raise different questions of public health from an engineering perspective. Therefore, the differences in characteristics between the new and corresponding predicate tobacco products do not cause the new tobacco products to raise different questions of public health related to product engineering.

### 4.3. TOXICOLOGY

A toxicology review was completed by Luis Dasilva on March 31, 2020.

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

- The following cigarette paper ingredients are added or increased:
  - SE0015685 and SE0015693:
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
  - SE0015686 and SE0015694:
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
  - SE0015691:
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
    - (b) (4)
- SE0015686 and SE0015694 showed an analytically inequivalent increase in formaldehyde yield and an analytically inequivalent decrease in 1, 3-butadiene

The decreased cancer risks for 1, 3-butadiene is considered to outweigh the increased cancer risk due to increased formaldehyde based on the current thinking of CTP. All other HPHC changes observed in all SE Reports were substantially equivalent. Therefore, the differences in characteristics between the new and corresponding 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 Dilip Venugopal on March 17, 2020 and June 26, 2020.

A finding of no significant impact (FONSI) was signed by Luis G. Valerio Jr., Ph.D., ATS on June 26, 2020. The FONSI was supported by an environmental assessment prepared by FDA on June 26, 2020.

## 6. CONCLUSION AND RECOMMENDATION

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

### Ingredients

- (b) (4) ↑ 86% - 100% (b) (4) mg/cigarette
  - SE0015685
  - SE0015686
  - SE0015691
  - SE0015693
  - SE0015694
- (b) (4) in Bands ↑ 335% - 493% (b) (4) mg/cigarette
  - SE0015685
  - SE0015686
  - SE0015691
  - SE0015693
  - SE0015694
- (b) (4) in Base Paper ↓ 16% - ↑ 0.3%
  - SE0015685
  - SE0015693
  - SE0015686
  - SE0015694
  - SE0015691
- (b) (4) ↑ 3.5% - 13%
  - SE0015685
  - SE0015693
  - SE0015686
  - SE0015694
  - SE0015691
- (b) (4) ↑ (b) (4) mg/cigarette
  - SE0015685
  - SE0015693
  - SE0015686
  - SE0015694
  - SE0015691
- (b) (4) ↑ (b) (4) mg/cigarette
  - SE0015685
  - SE0015686
  - SE0015691
  - SE0015693

- SE0015694
- (b) (4) ↑ 3233% (b) (4) mg/cigarette
  - SE0015685
- HPHCs
  - 1,3,-butadiene not analytically equivalent (HCl)
    - SE0015686, SE0015694: ↓ 20% (24.8 µg/cigarette)
  - Formaldehyde not analytically equivalent (ISO)
    - SE0015686, SE0015694: ↑ 18% (7.1 µg/cigarette)

The applicant has demonstrated that these differences in characteristics do not cause the new tobacco products to raise different questions of public health. The applicant provided smoke data under ISO and CI smoking regimens: tar, nicotine, carbon monoxide, NNN, NNK, aromatic amines (4-aminobiphenyl, 1-aminonaphthalene, 2-aminonaphthalene), carbonyls (acetaldehyde, acrolein, crotonaldehyde, formaldehyde), hydrocarbons (1,3-butadiene, isoprene, benzene, toluene), acrylonitrile, ammonia. SE0015686 and SE0015694 showed an analytically inequivalent increase according to TOST analysis in formaldehyde yield and an analytically inequivalent decrease in 1, 3-butadiene in the new products as compared to the corresponding predicate products. The decreased cancer risks for 1, 3-butadiene is considered to outweigh the increased cancer risk due to increased formaldehyde. All other HPHCs were analytically equivalent. Therefore, the differences in characteristics between the new and corresponding predicate tobacco products do not cause the new tobacco products to raise different questions of public health.

The predicate tobacco products were previously determined to be substantially equivalent by FDA under SE0004297, SE0014280, SE0014752, SE0014849, SE0014851, SE0014912, SE0014913, SE0014926, SE0014927, SE0014928 and SE0014930.

Where an applicant supports a showing of substantial equivalence 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 products in SE0015685 – SE0015694 and SE0015703 were previously determined to be substantially equivalent by FDA under SE0014927, SE0014930, SE0004297, SE0014280, SE0014752, SE0014849, SE0014912, SE0014851, SE0014928, SE0014926 and SE0014913, respectively. Comparison of the new tobacco products to the grandfathered tobacco products (Marlboro Menthol Box in SE0004297, Marlboro Menthol Box in SE0014280, Marlboro Blend No. 27 Box in SE0014752, Marlboro Medium 100's Box in SE0014849, Marlboro Medium Box in SE0014851, Merit Ultra Lights 100's Box in SE0014912, Marlboro Blend No. 27 Box in SE0014913, Marlboro Milds 100's Menthol Box in SE0014926, Marlboro Milds Menthol Box in SE0014927, Marlboro Milds Menthol Box in SE0014928, and Marlboro Milds 100's Menthol Box in SE0014930) reveals that the new tobacco products have the following differences in characteristics from Marlboro Menthol Box, Marlboro Menthol Box, Marlboro Blend No. 27 Box, Marlboro Medium 100's Box, Marlboro Medium Box, Merit Ultra Lights 100's Box, Marlboro Blend No. 27 Box, Marlboro Milds 100's Menthol Box, Marlboro Milds Menthol Box, Marlboro Milds Menthol Box, and Marlboro Milds 100's Menthol Box, the grandfathered tobacco products:

- SE0015685
  - (b) (4)
  - (b) (4) in Bands
  - (b) (4) in Base Paper
  - (b) (4)
  - (b) (4)
  - (b) (4)
  - (b) (4) in Tipping Paper
- SE0015686
  - (b) (4)
  - (b) (4) in Bands
  - (b) (4)
  - (b) (4) in Tipping Paper
- SE0015687
  - (b) (4) and/or (b) (4) in Cigarette Paper
  - (b) (4)
  - (b) (4)
- SE0015688
  - Tipping Ink
  - Tipping Ink Extender
  - (b) (4)
- SE0015689
  - Tipping Paper
  - Tipping Ink
  - Tipping Ink Extender
  - Tipping Adhesive
- SE0015690
  - (b) (4) in Tipping Paper
- SE0015691
  - (b) (4)
  - (b) (4) in Bands
  - (b) (4) in Base Paper
  - (b) (4)
  - (b) (4)
  - (b) (4)
  - Inks
- SE0015692
  - (b) (4) in Tipping Paper
- SE0015693 and SE0015694
  - (b) (4)
  - (b) (4) in Bands
  - (b) (4) in Base Paper
  - (b) (4)
  - (b) (4)
  - (b) (4)

- (b) (4) in Tipping Paper
- (b) (4)
- (b) (4)
- (b) (4)
- SE0015703
  - Inks
  - (b) (4) in Tipping Adhesive
  - (b) (4) in Tipping Paper
  - (b) (4) in Tipping Paper

The differences in characteristics listed above, other than the differences in tipping paper, inks, tipping adhesive, (b) (4) and (b) (4), are the same differences in characteristics identified for the new and grandfathered tobacco products in SE0004297, SE0014280, SE0014752, SE0014849, SE0014851, SE0014912, SE0014913, SE0014926, SE0014927, SE0014928 and SE0014930. Therefore, these differences do not cause the new tobacco products in SE0015685 – SE0015694 and SE0015703 to raise different questions of public health. Additionally, for the same reasons as discussed above, the differences in (b) (4) bands, cigarette paper, (b) (4) and (b) (4) between the new tobacco products in SE0015685 – SE0015694 and SE0015703 and the grandfathered tobacco products do not cause the new tobacco products to raise different questions of public health. Therefore, whether comparing the new tobacco products in SE0015685 – SE0015694 and SE0015703 to the predicate or grandfathered tobacco products, the new tobacco products do not raise different questions of public health.

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 corresponding 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 SE0015685 – SE0015694 and SE0015703, as identified on the cover page of this review.