

Technical Project Lead (TPL) Review of Exemption Requests

New Products Subject of this Review ¹	
STNs	EX0002080.PD1, EX0002092.PD1
Common Attributes	
Submission date	June 25, 2021 and June 28, 2021
Receipt date	June 25, 2021 and June 28, 2021
Applicant	R.J. Reynolds Tobacco Company
Product manufacturer	R. J. Reynolds Tobacco Company
Product category	Cigarettes
Product subcategory	Filtered
Cross-Referenced Submissions	
All EX Requests	None
Supporting FDA Memoranda Relied Upon in this Review	
All EX Requests	Internal Memorandum: Social Science Evaluation of the Design of Cigarette Tipping Paper, May 16, 2017
Recommendation	
Issue Exempt (EX) orders for the new tobacco products subject of this review.	

Technical Project Lead (TPL):

Digitally signed by Jikun Liu -S
Date: 2022.08.19 12:14:00 -04'00'

Jikun Liu, Ph. D.
Chemistry Team Supervisor
Division of Product Science

Signatory Decision:

Concur with TPL recommendation and basis of recommendation

Todd L. Cecil -S Digitally signed by Todd L. Cecil -S
Date: 2022.08.19 15:30:09 -04'00'

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

¹ Product details, amendments, and dates provided in the Appendix. EX means exemption (request) from substantial equivalence. STN means submission tracking number.

TABLE OF CONTENTS

1. BACKGROUND..... 3
 1.1. NEW AND ORIGINAL PRODUCTS 3
 1.2. REGULATORY ACTIVITY 3
 1.3. SCOPE OF REVIEW 3

2. COMPLIANCE REVIEW 3

3. TOBACCO ADDITIVE MODIFICATION..... 3

4. SCIENTIFIC REVIEW 4

5. ENVIRONMENTAL DECISION 4

6. CONCLUSION AND RECOMMENDATION 4

7. APPENDICES 8
 APPENDIX A. NEW AND ORIGINAL PRODUCTS..... 8

LIST OF TABLES

Table 1. Disciplines reviewed..... 3

1. BACKGROUND

1.1. NEW AND ORIGINAL PRODUCTS

The applicant submitted information for the new and original products listed in detail in the Appendix.

1.2. REGULATORY ACTIVITY

See appendices for products and amendments.

1.3. SCOPE OF REVIEW

This review captures all compliance, regulatory, and scientific reviews completed for the new products that are the subject of this review.

Table 1. Disciplines reviewed

Discipline	Cycle 1	
	Reviewer(s)	Review Date
regulatory	Marieme Ba	7/20/2021
chemistry	Lauren Girard	6/27/2022
environmental science	John Teem	6/3/2022

2. COMPLIANCE REVIEW

The original products in EX0002080.PD1 and EX0002092.PD1 were determined to be exempt from the requirements of section 905(j) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) relating to the demonstration of substantial equivalence by FDA. Reports under section 905(j)(1)(A)(ii) (Abbreviated Reports) were submitted, and at least 90 days have elapsed since receipt of the Abbreviated Reports by FDA. Therefore, the original products are eligible for modification under the Exemption Request pathway.²

3. TOBACCO ADDITIVE MODIFICATION

The applicant claims that the modifications of the original products compared to the corresponding new products are the result of:

- deleting an additive (cork tipping paper) in all the EX Requests
- adding an additive (white tipping paper) in all the EX Requests
- deleting an additive (filter tow) in all the EX Requests
- adding an additive (alternate filter tow) in all the EX Requests
- deleting an additive (b) (4) in all the EX Requests
- adding an additive (b) (4) in all the EX Requests
- increasing the quantities of existing additives (b) (4) in all the EX Requests
- deleting an additive (b) (4) in EX0002092.PD1
- deleting an additive (b) (4) in EX0002092.PD1

² Any product that can be sold under the FD&C Act (e.g., legally marketed in the United States) is eligible for modification under the Exemption Request pathway.

4. SCIENTIFIC REVIEW

The review finds these modified ingredients (see Section 3) are additives because their intended use may reasonably be expected to result, directly or indirectly, in their becoming a component or otherwise affecting the characteristics of the products. The review concludes that the modifications are minor modifications of a product in accordance with section 905(j)(3)(A)(i) of the FD&C Act.

5. ENVIRONMENTAL DECISION

A finding of no significant impact (FONSI) was signed by Luis Valerio, Ph.D. on June 6, 2022. The FONSI was supported by an environmental assessment prepared by FDA on June 6, 2022.

6. CONCLUSION AND RECOMMENDATION

I concur with the conclusion of the scientific review that these modifications (see Section 3) are a minor modification of a product in accordance with section 905(j)(3)(A)(i) of the FD&C Act. I concur that the modified ingredients are “additives” as defined in section 900(1) of the FD&C Act. In addition, it is my conclusion that, consistent with section 905(j)(3)(A)(ii) of the FD&C Act, an SE Report is not necessary to ensure that permitting the new products to be marketed would be appropriate for the protection of the public health.

In the proposed modification to the tipping papers for all EX Requests, the cork tipping papers of the original products purchased from (b) (4) are substituted with white tipping papers purchased from the same supplier in the new products. This tipping paper modification results in (b) (4) mg/cig) lower quantity of base paper (b) (4) and (b) (4) mg/cig) lower quantity of tipping inks (e.g., yellow ink, brown ink, gold ink) for the new products compared to the original products. This modification also leads to addition of (b) (4) mg/cig of a lip release agent to the new products, which is absent from the original products. Lip release agents, which possess hydrophobic characteristics to serve as a moisture barrier to reduce the stickiness of cigarette filters to consumers’ lips and generate a comfortable sensation during the smoking process, are commonly applied to coat the base paper substrate of tipping paper.³ Lip release agents such as nitrocellulose, silicones, polyvinyl acetate or butylacrylate hydrophobic copolymers are applied to one side of the base substrate of the tipping paper.⁴ The modifications to these tipping paper ingredients are not expected to significantly alter the smoke chemistry and consumer exposure to chemical constituents via the inhalation, oral and dermal routes. This is because the tipping papers are not combusted, volatilized, or otherwise release any tipping paper ingredients and harmful and potentially harmful constituents (HPHCs) to mainstream smoke (MSS) during normal cigarette consumption. Furthermore, according to an internal memorandum, there are limited scientific data on the influence of consumer perception on changes in tipping paper, and therefore any changes in consumer behavior such as increased initiation or use solely due to cigarette design are likely to be minimal.⁵ The applicant did not mention any difference in perforation technique between the tipping papers of the new and original products, implying that the same perforation technique was

³ *The Power of Tactility: Tipping Paper in Interaction with the Consumer* | CORESTA. <https://www.coresta.org/abstracts/power-tactility-tipping-paper-interaction-consumer-30927.html>. Accessed 20 May 2022.

⁴ Salonen, Hannu, and Helena Kanervo. *Method of Producing a Filter Cigarette with Tipping Paper Having Lip Release Properties*. US5595196A, <https://patents.google.com/patent/US5595196A/en>. Accessed 20 May 2022.

⁵ Internal Memorandum: Social Science Evaluation of the Design of Cigarette Tipping Paper, May 16, 2017

applied to the tobacco products for all EX Requests, which does not raise concerns with respect to chemistry.

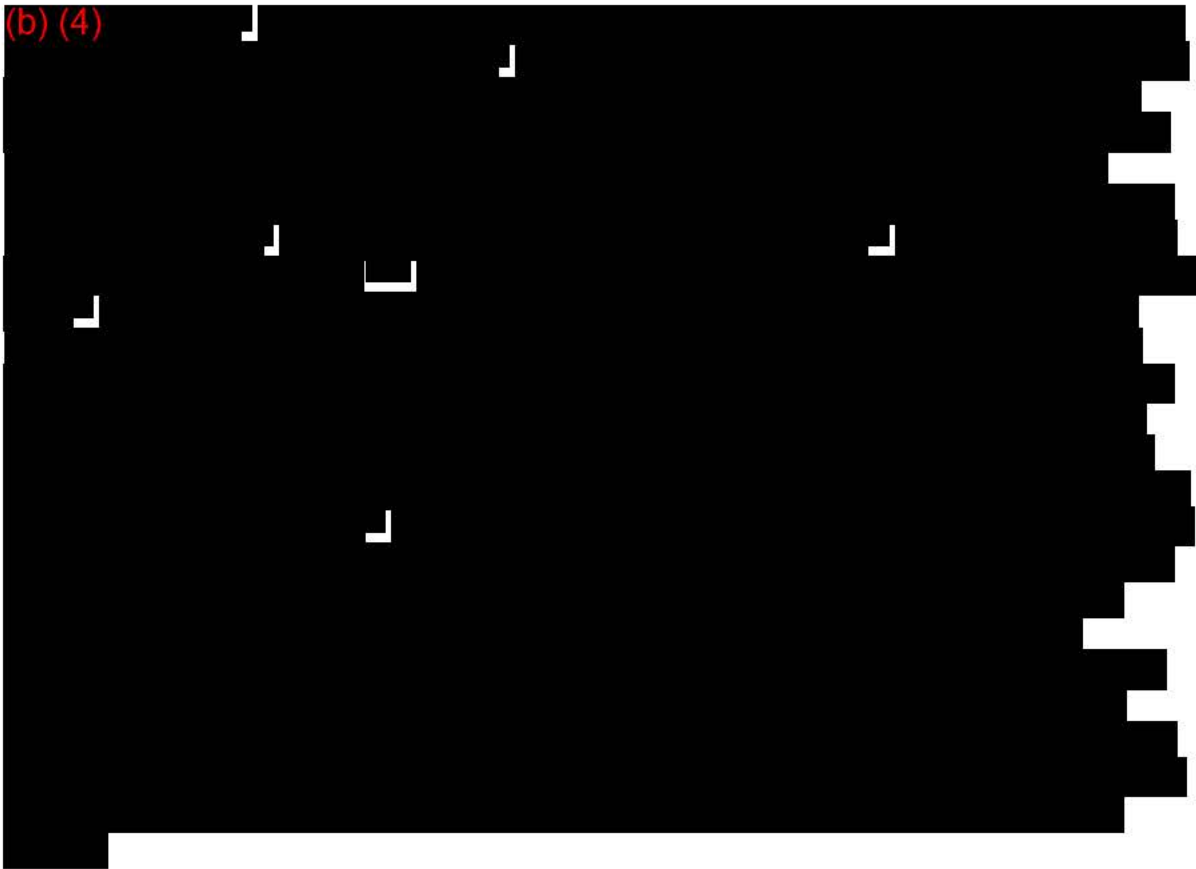
For all EX Requests, the applicant proposed to use a filter tow purchased from (b) (4) in the new products instead of the filter tow supplied by (b) (4) in the original products. The filter tows of the new products contain (b) (4) mg/cig) lower amount of (b) (4) compared to the original products. Additionally, the filter tows of the original products contain (b) (4) mg/cig of (b) (4) and (b) (4) mg/cig of (b) (4), which are absent from those of the new products. The lower level of (b) (4) in the new products compared to the original products and removal of (b) (4) from the new products do not raise chemistry concerns. The filter tows of the new products also contain (b) (4) mg/cig) lower level of (b) (4) than the corresponding original products. A study by (b) (4) indicates that (b) (4) added in a filter does not significantly affect nicotine, carbon monoxide (CO), and tar yields in mainstream cigarette smoke.⁶ Therefore, the chemistry review determines that decreasing (b) (4) in the filter tow of the new products compared to the original products is not anticipated to impact the smoke chemistry of the new products. Furthermore, because the filter tows are not combusted, volatilized, or otherwise release filter tow ingredients or HPHCs to the MSS of cigarettes during normal cigarette consumption, the modifications of ingredients in the filter tow are not expected to significantly alter the smoke chemistry of the new products. All EX Requests indicate that the new and corresponding original products have the same ventilation of 22%. The applicant provided Certificates of Analyses (COA) for the filter tows and calculations showing the vendor specifications and measured values of denier per filament (DPF) and total denier (TD) for the new and corresponding original products. All measured DPF and TD values are within specification limits (measured minimum and maximum values) and do not raise chemistry concerns. For EX0002080.PD1, the measured DPF of the new product is (b) (4) higher than the original product and the measured TD of the new product is (b) (4) higher than the original product. For EX0002092.PD1, the measured TD of the new product is (b) (4) higher than the original product while the DPF value of the new product is identical to the original product. Differences in the DPF and TD may affect the filter efficiency, filter pressure drop and smoke transfer. An increased DPF may decrease the pressure drop and filter efficiency, while an increased TD may increase the pressure drop and filter efficiency. The cigarettes containing less efficient filter tow (i.e., higher DPF, lower TD) may emit higher levels of total particulate matter (TPM) and carbon monoxide (CO). However, a study by Parker and Montgomery indicates that relatively large variations in DPF and TD only lead to small changes in mainstream smoke yields of TPM and CO.⁷ Therefore, for all EX Requests, the slightly different or identical DPF and TD quantities between the new and original products are not anticipated to significantly impact the mainstream smoke constituent yields of the new products compared to the original products.

The applicant proposed to delete (b) (4) (all EX Requests) and complex flavor ingredient (b) (4) (EX0002092.PD1) from the tobacco of the original product and add (b) (4) to the tobacco of the new product. (b) (4) without an added flavor. (b) (4)

⁶ (b) (4)

⁷ Parker JA, Montgomery RT. Design criteria for ventilated filters. Beiträge zur Tabakforschung International/Contributions to Tobacco Research. 1979 Dec 1;10(1):1-6.

(b) (4)



In EX0002080.PD1, the new product contains (b) (4) mg/cig) higher level of (b) (4) and (b) (4) mg/cig) higher quantity of (b) (4) than the original product. In EX0002092.PD1, (b) (4) (b) (4) mg/cig), an ingredient added to the original product, is removed from the new product. The new product also contains (b) (4) mg/cig) higher quantity of (b) (4) compared to the original product. Additionally, (b) (4) mg/cig of (b) (4), which is not present in the original product, is added to the new product. The applicant stated that (b) (4)

(b) (4)

⁸ (b) (4)

⁹ Eccles, R. (1994). "Menthol and Related Cooling Compounds". *J. Pharm. Pharmacol.* 46 (8): 618–630. doi:10.1111/j.2042-7158.1994.tb03871

¹⁰ Henderson, B. J.; Wall, T. R.; Henley, B. M.; Kim, C. H.; Nichols, W. A.; Moaddel, R.; Xiao, C.; Lester, H. A. (2016). "Menthol Alone Upregulates Midbrain nAChRs, Alters nAChR Subtype Stoichiometry, Alters Dopamine Neuron Firing Frequency, and Prevents Nicotine Reward". *J. Neurosci.* 36 (10): 2957–2974.

¹¹ Biswas, L.; Harrison, E.; Gong, Y.; Avusula, R.; Lee, J.; Zhang, M.; Rousselle, T.; Lage, J.; Liu, X. (2016). "Enhancing effect of menthol on nicotine self-administration in rats". *Psychopharmacology.* 233 (18): 3417–3427.

¹² Wickham, R. J. (2015). "How Menthol Alters Tobacco-Smoking Behavior: A Biological Perspective". *Yale J. Biol. Med.* 88 (3): 279–287.

(b) (4)

¹⁵ Behrendt, H.J et al., *British Journal of Pharmacology*, 141(4), 737-745 (2004).

(b) (4).¹⁶ The addition of more (b) (4) to the tobacco of the new products can increase the quantity of nicotine by \leq (b) (4) mg/cig in the new products compared to the original products for all EX Requests; however, this minor nicotine increase is not expected to have a significant impact on the nicotine delivery of the new products. For all EX Requests, the modifications to the existing additives result in overall quantity increases not greater than (b) (4) mg/cig for the new products compared to the original products, which accounts for \leq (b) (4)% of the weight of the new product. These ingredient increases are not expected to materially affect any other characteristics (e.g., materials, ingredients, design, composition, heating source, or other features) and do not significant impact the smoke chemistry of the new products.

Lastly, I find that an exemption for this modification is otherwise appropriate as required by section 905(j)(3)(A)(iii) of the FD&C Act. Therefore, the new products should be found exempt from the requirements of substantial equivalence under section 910(a)(3)(A) of the FD&C Act.

The original products are eligible for modification through the Exemption Request pathway because they can be legally marketed in the United States. The original products are previously found Exempt by FDA, reports under section 905(j)(1)(A)(ii) (Abbreviated Reports) were submitted, and 90 days have elapsed since FDA receipt of the Abbreviated Reports.

FDA has examined the environmental effects of finding the new products exempt and made a finding of no significant impact.

An exempt order should be issued for the new products, as identified on the cover page of this review.

7. APPENDICES

Appendix A. New and original products

Common Attributes		
Submission date	June 25, 2021	
Receipt date	June 25, 2021	
Applicant	R.J. Reynolds Tobacco Company	
Product manufacturer	R.J. Reynolds Tobacco Company	
Product category	Cigarettes	
Product subcategory	Combusted, Filtered	
Attributes	New Product	Original Product
STN	EX0002080.PD1	EX0000215
Product name	Newport Non-Menthol Gold Box ¹⁷	Newport Menthol Gold Classic Box ¹⁷
Eligibility status	Not applicable	Previously found EX
Marketing authorization date	Not applicable	6/13/2018
Abbreviated report date	Not applicable	11/1/2018
Package type	Box	Box
Package quantity	20 cigarettes	20 cigarettes
Characterizing flavor	None	Menthol
Length	80 mm	80 mm
Diameter	7.9 mm	7.9 mm
Ventilation	22%	22%
Product modifications	<p>Addition/Deletion of tobacco additives:</p> <ul style="list-style-type: none"> • Deletion of Cork Tipping Paper 60mm [(b) (4)]; [(b) (4)] mg/cigarettes • Addition of White Tipping Paper 60mm [(b) (4)] [(b) (4)] mg/cigarette • Deletion of Filter Tow [(b) (4)] [(b) (4)]; [(b) (4)] mg/cigarette • Addition of Alternate Filter Tow [(b) (4)] [(b) (4)]; [(b) (4)] mg/cigarette • Deletion of [(b) (4)]; [(b) (4)] mg/cigarette • Addition of [(b) (4)]; [(b) (4)] mg/cigarette <p>Increasing/Decreasing the quantity of existing tobacco additives:</p> <ul style="list-style-type: none"> • Increase in the quantity of [(b) (4)] • Increase in the quantity of [(b) (4)] 	
Common Attributes		

¹⁷ Brand/sub-brand or other commercial name used in commercial distribution.

Submission date	June 28, 2021	
Receipt date	June 28, 2021	
Applicant	R.J. Reynolds Tobacco Company	
Product manufacturer	R.J. Reynolds Tobacco Company	
Product category	Cigarettes	
Product subcategory	Combusted, Filtered	
Attributes	New Product	Original Product
STN	EX0002092.PD1	EX0000278
Product name	Newport Non-Menthol Gold Box 100s ¹⁸	Newport Menthol Gold Classic Box 100 ¹⁸
Eligibility status	Not applicable	Previously found EX
Marketing authorization date	Not applicable	12/3/2018
Abbreviated report date	Not applicable	5/17/2019
Package type	Box	Box
Package quantity	20 cigarettes	20 cigarettes
Characterizing flavor	None	Menthol
Length	99 mm	99 mm
Diameter	7.9 mm	7.9 mm
Ventilation	22%	22%
Product modifications	<p>Addition/Deletion of tobacco additives:</p> <ul style="list-style-type: none"> • Deletion of Cork Tipping Paper 67 MM [(b) (4) (b) (4)] mg/cigarette • Addition of White Tipping Paper 67 MM [(b) (4) .]; [(b) (4)] mg/cigarette • Deletion of Filter Tow [(b) (4) [(b) (4) (b) (4)] mg/ cigarette • Addition of Filter Tow [(b) (4) [(b) (4) (b) (4)] mg/ cigarette • Deletion of [(b) (4) [(b) (4)] mg/ cigarette • Addition of [(b) (4) [(b) (4)] mg/cigarette • Deletion of [(b) (4) [(b) (4)] mg/ cigarette • Deletion of [(b) (4) [(b) (4)] mg/ cigarette <p>Increasing/Decreasing the quantity of existing tobacco additives:</p> <ul style="list-style-type: none"> • Increase in the quantity of [(b) (4)] • Increase in the quantity of [(b) (4)] 	

¹⁸ Brand/sub-brand or other commercial name used in commercial distribution.