

**Programmatic Environmental Assessment for Marketing  
Orders for New Waterpipe Tobacco  
by Al Fakher Distribution USA, Inc.**

**Prepared by Center for Tobacco Products  
U.S. Food and Drug Administration**

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## 1. Applicant and Manufacturer Information

<b>Applicant Name:</b>	Al Fakher Distribution USA, Inc.
<b>Applicant Address:</b>	14931 Gwenchris Court Paramount, CA 90723
<b>Manufacturer Name:</b>	Al Fakher Tobacco Factory, F.Z.E.
<b>Product Manufacturing Location:</b>	P.O. Box 20037, Free Zone Gate No. 4 Ajman, United Arab Emirates

## 2. Product Information

### New Product Names, Submission Tracking Numbers (STN), and Original Product Names

<b>New Product Name</b>	<b>STN</b>	<b>Original Product Name</b>	<b>STN</b>
Al Fakher Citrus with Mint Flavour 1000 grams	EX0001098	Al Fakher Mint Flavour 1Kg	GF1908322
Al Fakher Citrus with Mint Flavour 250 grams	EX0001099	Al Fakher Mint Flavour 250 gram	GF1908319
Al Fakher Grape with Berry Flavour 250 grams	EX0001101	Al Fakher Grape Flavour 250 grams	GF1908334
Al Fakher Grape with Berry Flavour 1000 grams	EX0001102	Al Fakher Grape Flavour 1Kg	GF1908331
Al Fakher Citrus with Mint Flavour 50 grams	EX0001103	Al Fakher Mint Flavour 50 grams	GF1908313
Al Fakher Gum with Mint Flavour 50 grams	EX0001104	Al Fakher Mint Flavour 50 grams	GF1908313
Al Fakher Gum with Mint Flavour 250 grams	EX0001105	Al Fakher Mint Flavour 250 grams	GF1908319
Al Fakher Grape with Berry Flavour 50 grams	EX0001106	Al Fakher Grape Flavour 50 grams	GF1908333
Al Fakher Gum with Mint Flavour 1000 grams	EX0001107	Al Fakher Gum with Mint Flavour 1000 grams	GF1908322
Al Fakher Watermelon with Mint Flavour 1000 grams	EX0001108	Al Fakher Mint Flavour 1Kg	GF1908322
Al Fakher Watermelon with Mint Flavour 250 grams	EX0001109	Al Fakher Mint Flavour 250 grams	GF1908319
Al Fakher Watermelon with Mint Flavour 50 grams	EX0001110	Al Fakher Mint Flavour 50 grams	GF1908313

### Product Identification

<b>Product Category:</b>	Waterpipe Tobacco
<b>Product Subcategory:</b>	Waterpipe Tobacco Filler
<b>Product Number per Retail Unit:</b>	Products include 50, 250 and 1000 g
<b>Product Package:</b>	Outer box with inner polyethylene pouch containing 50, 250 or 1000 g of waterpipe tobacco

### **3. The Need for the Proposed Actions**

The proposed actions, requested by the applicant, are for the Food and Drug Administration (FDA) to issue exemptions from substantial equivalence (SE) reporting for marketing orders under section 905(j)(3) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) for 12 waterpipe tobacco products. A tobacco product that is modified by adding or deleting a tobacco additive, or increasing or decreasing the quantity of an existing tobacco additive, may be considered for exemption from demonstrating substantial equivalence if (1) the product is a modification of another tobacco product and the modification is minor, (2) the modifications are to a tobacco product that may be legally marketed under the FD&C Act, (3) an SE Report is not necessary to ensure that permitting the tobacco product to be marketed would be appropriate for the protection of public health, (4) the modified tobacco product is marketed by the same organization as the original product, and (5) an exemption is otherwise appropriate.

The applicant wishes to introduce the new tobacco products into interstate commerce for commercial distribution in the United States. The applicant must obtain written notification that FDA has granted the products exemptions from demonstrating substantial equivalence under section 905(j)(3) before submitting an abbreviated report. Ninety days after FDA receipt of the abbreviated report, the applicant may introduce or deliver for introduction into interstate commerce for commercial distribution the new products for which the applicant has obtained exemptions from demonstrating substantial equivalence.

The original products are grandfathered products commercially marketed in the United States as of February 15, 2007. The new products are currently marketed in the United States and being manufactured by modifying the corresponding original products. These modifications are to the flavor additives (Confidential Appendix 1).

### **4. Alternatives to the Proposed Actions**

The no-action alternative is FDA does not issue marketing orders for the new tobacco products.

### **5. Potential Environmental Impacts of the Proposed Actions and Alternatives – Manufacturing the New Products**

The manufacturing facility is located outside of the United States.

### **6. Potential Environmental Impacts of the Proposed Actions and Alternatives – Use of the New Products**

The Agency considered potential impacts to resources in the environment that could be affected by use of the new products and found no significant impacts based on Agency-gathered information and the applicant's submitted information. Included in the information the Agency considered were the projected market volumes for the new products (Confidential Appendix 2).

#### **6.1. Affected Environment**

The affected environment includes human and natural environments in the United States because the marketing orders would allow for the new tobacco products to be sold to consumers in the United States.

## 6.2. Air Quality

The impacts from use of waterpipe tobacco products include exposure to secondhand smoke (SHS) produced from burned tobacco. Particles emitted by smoking may remain on surfaces, be re-emitted back into the gas phase, or react with oxidants and other compounds in the environment to yield secondary pollutants, thirdhand smoke (THS). These pollutants coexist in mixtures in the environment alongside SHS (Burton, 2011; Matt et al., 2011). While these studies focus on SHS from cigarette smoking, research suggests that SHS from waterpipe smoking may be worse due to higher concentrations of carcinogens, carbon monoxide, and other chemicals (Daher et al., 2010; Weitzman et al., 2016).

There is no safe level of exposure to SHS (U.S. Department of Health and Human Services, 2006a and 2006b). Even low levels of SHS can harm children and adults in many ways, including the following:

- The U.S. Surgeon General estimates that living with a smoker increases a nonsmoker's chances of developing lung cancer by 20 to 30% (U.S. Department of Health and Human Services, 2014).
- Exposure to SHS increases school children's risk for ear infections, lower respiratory illnesses, more frequent and more severe asthma attacks, and slowed lung growth. It can cause coughing, wheezing, phlegm, and breathlessness (U.S. Department of Health and Human Services, 2006a and 2006b).
- SHS causes more than 40,000 deaths a year (U.S. Department of Health and Human Services, 2014).

Although use of cigarettes in the United States is declining<sup>1</sup>, use of waterpipe by youth and young adults is increasing (Grinberg, 2015). Researchers believe this increase is due to the belief that waterpipe tobacco smoking is less addictive and harmful than cigarette smoking (Primack et al., 2008). However, waterpipe tobacco smoking exposes users to nicotine, carbon monoxide, polycyclic aromatic hydrocarbons, volatile aldehydes, phenols, heavy metals and other constituents (Primack et al., 2016). Comparisons between cigarette smoking and waterpipe tobacco smoking suggests that users of waterpipe inhale as much as 120 times the tobacco smoke than cigarette users in a single session with increased concentrations of many components found in cigarette smoke. Waterpipe tobacco smoking is associated with various respiratory diseases, cancer, low birthweight, cardiovascular disease, and other health related issues (Waziry et al., 2017). This is especially concerning considering the prevalence of youth use (Primack et al. 2016).

As of March 2020, 28 states and the District of Columbia have implemented comprehensive smoke-free laws (American Lung Association, 2020). Such laws are expected to reduce the levels of non-user exposure to SHS and THS.

The Agency does not anticipate that new chemicals would be released into the environment as a result of use of the new products, relative to chemicals released into the environment due to use of other waterpipe tobacco products already on the market because (1) the combustion products from the new products would be released in the same manner as the combustion products of the original products and any other marketed waterpipe tobacco products; (2) the new products are already on the market and the new products are expected to compete with, or replace, other currently marketed waterpipe

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<sup>1</sup> U.S. Alcohol and Tobacco Tax and Trade Bureau (TTB) statistical data available at: <https://www.ttb.gov/tobacco/tobacco-stats.shtml>. Accessed September 29, 2020.



(1) the disposal of the new products would be the same as the disposal of other waterpipe tobacco products that are currently marketed in the United States, and (2) there would be no anticipated increase in the amount of waterpipe tobacco being disposed of as the new products are already on the market and are anticipated to compete with similar marketed waterpipe tobacco.

#### **7.4. Water Resources**

No changes in any impacts on water resources are expected due to disposal of the waterpipe tobacco and packaging from the new products because the chemicals in the new products are used in currently marketed waterpipe tobacco. Furthermore, the new products are already on the market and compete with other waterpipe tobacco on the market.

#### **7.5. Solid Waste**

Information on disposal of tobacco and water from waterpipe smoking is scarce. However, users who smoke waterpipe tobacco at home discard the waste in various places including trashcans, down the drain, in potted plants, in their yard, and in storm drains (Kaseem et al., 2019). This is concerning considering the various compounds that may leach out of the discarded tobacco, water, and charcoal after disposal including remaining heavy metals (Al-Kazwini et al., 2015).

Similar to waterpipe tobacco, discarded cigarette butts are known to leach out into water, potentially threatening human health and the environment, especially marine ecosystems (Kadir and Sarani, 2015). The environmental toxicity of cigarette butts due to air emissions is not well studied. The chemicals in cigarette butts can be the original chemicals in the unsmoked cigarettes or the pyrolysis and distillation products deposited in the cigarette butts. Airborne emissions from cigarette butts after disposal depend on the environmental conditions and the chemicals in the butts. These emissions can be influenced by several factors, such as the cigarette brand, cigarette length, filter material, types of tobacco, ingredients in the cigarette and tobacco filler, number of puffs, and the mass transfer behavior of combustion products along the cigarette.

The Agency does not foresee the introduction of the new products would notably affect the current waterpipe tobacco and packaging waste generated from all waterpipe tobacco products. The waste generated due to disposal of the new products would be in the same manner as any other waste generated from any other waterpipe tobacco products marketed in the United States. The amount of waterpipe tobacco generated would be equivalent to the market projections (Confidential Appendix 2) and a portion of that would be littered.

#### **7.6. Socioeconomics and Environmental Justice**

The Agency does not anticipate changes in impacts on socioeconomic conditions or environmental justice from disposal of the new products. The waste generated due to disposal of the new products would be handled in the same manner as the waste generated from disposal of other waterpipe tobacco products in the United States. No new emissions are expected due to disposal of the new products; therefore, there would be no disproportionate impacts on minority or low-income populations.

#### **7.7. Impacts of the No-Action Alternative**

The environmental impacts of the no-action alternative would not change the existing condition of disposal of waterpipe tobacco and packaging, as many other similar tobacco products would continue to be disposed of in the United States.





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Primack BA, Sidani J, Agarwal AA, Shadel WG, Donny EC, Eissenberg TE. Prevalence of and associations with waterpipe tobacco smoking among U.S. university students. *Annals of Behavioral Medicine*. 2008;36(1):81–86.

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U.S. Department of Health and Human Services. 2006b. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General—Secondhand Smoke: What It Means to You (Consumer Booklet). Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Coordinating Center for Health Promotion, Office on Smoking and Health. Atlanta, GA.

U.S. Environmental Protection Agency. (2019). Advancing Sustainable Materials Management: 2017 Fact Sheet. Washington, DC: U.S. Environmental Protection Agency, Office of Land and Emergency Management. November 2019.

Waziry R, Jawad M, Ballout RA, Al Akel M, Akl EA. The effects of waterpipe tobacco smoking on health outcomes: an updated systematic review and meta-analysis. *International Journal of Epidemiology*. 2017;46(1):32-43.

Weitzman M, Yusufali AH, Bali F, Vilcassim MJR, Gandhi S, Peltier R, Nadas A, Sherman S, Lee L, Hong Z, Shearston J, Park SH, Gordon T. Effects of hookah smoking on indoor air quality in homes. *Tobacco Control*. 2016;26:586-591.

**CONFIDENTIAL APPENDIX 1. Modifications: New Products as Compared with the Corresponding Original Products**

STN	Modification
EX0001098	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4) and (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001099	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4) and (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (6)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001101	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavor (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001102	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavor (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001103	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4) and (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001104	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001105	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001106	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavor (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001107	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001108	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001109	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>
EX0001110	<ul style="list-style-type: none"> <li>• Addition of complex purchased flavors (b) (4)</li> <li>• Decreased amount of complex purchased flavor (b) (4)</li> <li>• Decreased amount of (b) (4)</li> </ul>

**CONFIDENTIAL APPENDIX 2. Market Volumes for the New and Corresponding Original Products**

Current market volume and first- and fifth-year market volume projections of the new and original products. The applicant stated that the new and original products are currently being marketed simultaneously and that if the EX request is granted, the new products and original products would continue to be marketed simultaneously.

STN	Current Year Market Volume	Projected Market Volume	
	Tobacco Product (metric tons)	First-Year Tobacco Product (metric tons)	Fifth-Year Tobacco Product (metric tons)
EX0001098	(b) (4)		
Original Product to EX0001098 (GF1908322)			
EX0001099			
Original Product to EX0001099 (GF1908322)			
EX0001101	(b) (4)		
Original Product to EX0001101 (GF1908334)			
EX0001102			
Original Product to EX0001102 (GF1908331)			
EX0001103			
Original Product to EX0001103 (GF1908313)			
EX0001104			
Original Product to EX0001104 (GF1908313)			
EX0001105	(b) (4)		
Original Product to EX0001105 (GF1908319)			
EX0001106			
Original Product to EX0001106 (GF1908333)			
EX0001107			
Original Product to EX0001107 (GF1908322)			
EX0001108	(b) (4)		
Original Product to EX0001108 (GF1908322)			
EX0001109	(b) (4)		
Original Product to EX0001109 (GF1908319)			
EX0001110	(b) (4)		
Original Product to EX0001110 (GF1908313)			
<b>Total</b>	(b) (4)		