

1 [Environment Code - Flame Retardant Chemicals in Upholstered Furniture and Juvenile  
2 Products]

3 **Ordinance amending the Environment Code to ban the sale in San Francisco of**  
4 **Upholstered Furniture and Juvenile Products made with or containing an added Flame**  
5 **Retardant Chemical.**

6 NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.  
7 **Additions to Codes** are in *single-underline italics Times New Roman font*.  
8 **Deletions to Codes** are in *strikethrough italics Times New Roman font*.  
9 **Board amendment additions** are in double-underlined Arial font.  
10 **Board amendment deletions** are in ~~strikethrough Arial font~~.  
11 **Asterisks (\* \* \* \*)** indicate the omission of unchanged Code  
12 subsections or parts of tables.

13 Be it ordained by the People of the City and County of San Francisco:

14 Section 1. Findings.

15 (a) The San Francisco Precautionary Principle Policy Statement in Chapter 1 of the  
16 Environment Code seeks to minimize harm by using the best available science to make policy  
17 choices that take into account the least environmentally harmful alternatives. A precautionary  
18 approach does not merely ask whether a chemical is safe, it also asks whether its use serves  
19 any beneficial purpose in the first place.

20 (b) The California Bureau of Electronic and Appliance Repair, Home Furnishings and  
21 Thermal Insulation (BEARHFTI) is charged with developing state flammability standards for  
22 adoption via regulation. Since the adoption of California Technical Bulletin 117 ("TB 117") in  
23 1975 setting forth flammability standards, flame retardant chemicals have been routinely used  
24 in upholstered furniture and certain juvenile products to meet TB 117's open-flame standard.  
25 In 2013, the State of California updated its flammability standard with the adoption of  
Technical Bulletin 117-2013 ("TB 117-2013"). Flame retardant chemicals were commonly

1 used to meet TB 117. By contrast, compliance with TB 117-2013 is widely being achieved  
2 without the use of flame retardant chemicals. TB 117-2013 also exempts certain juvenile  
3 products from meeting its flammability standard.

4 (c) Scientists have found that organohalogens and some organophosphorous flame  
5 retardant chemicals exhibit one or more of the key characteristics of a class of synthetic  
6 organic compounds commonly referred to as Persistent Organic Pollutants (POPs), in that  
7 they are bio-accumulative, persistent, capable of long range transport, and/or toxic.

8 (d) A study led by Duke University published in 2012 of residential couches purchased  
9 in the United States between 1985 and 2010 revealed that the foam inside 85% of couches  
10 tested contained flame retardant chemicals.

11 (e) Another Duke University led study published in 2011 revealed that foam in 80% of  
12 tested baby products contained toxic or potentially harmful flame retardant chemicals, and  
13 that the most commonly occurring flame retardant in these products was tris(1,3-  
14 dichlorisopropyl) phosphate (TDCPP). Furthermore, testing by the Washington Department of  
15 Ecology published in the Department's report to the Washington State legislature and most  
16 recently updated in 2015, uncovered a variety of flame retardants in children's products and  
17 upholstered furniture, including six halogenated flame retardants. A more recent Duke  
18 University study published in 2015 found a correlation between infants' exposure to juvenile  
19 products containing added flame retardants, and the level of TDCPP, one type of halogenated  
20 flame retardant chemical, in the infants' bodies.

21 (f) Inhalation and ingestion of indoor dust is a common route of human exposure to  
22 flame retardant chemicals. Studies have shown that indoor dust contains anywhere from 1.5  
23 to 50 times greater concentration of flame retardant chemicals than the outdoor environment.  
24 Given that humans spend 90% of their time indoors, human exposure to flame retardants can  
25 be significant.

1 (g) A 2010 National Health and Nutrition Examination Survey conducted by the  
2 National Center for Health Statistics detected polybrominated diphenyl ether ("PBDE") flame  
3 retardants in the blood of 97% of those surveyed. Children living in California have some of  
4 the highest documented blood PBDE concentrations of any population studied. A 2014  
5 University of California, Berkeley study found flame retardants in the dust of 100% of the  
6 California early childhood education facilities studied. In addition, TDCPP levels in 51% of the  
7 facilities studied exceeded Proposition 65 guidelines for carcinogens.

8 (h) Scientists recognize the urgency to reduce the exposure of vulnerable populations,  
9 particularly young children, to flame retardant chemicals. A consensus statement issued by  
10 the Project Targeting Environmental Neurodevelopmental Risks (Project TENDR) found that  
11 PBDEs are associated with neurodevelopmental disorders in children.

12 (i) TDCPP, tris(2-chloroethyl) phosphate (TCEP), and Tris(2,3-dibromopropyl)  
13 phosphate (TDBPP) have been linked to cancer, as well as repercussions on both  
14 reproductive health and embryo development. In addition, these chemicals are listed on  
15 California's Proposition 65 list of chemicals known to cause cancer, birth defects, or other  
16 reproductive harm.

17 (j) In 2017, the federal Consumer Product Safety Commission issued a guidance  
18 document based on the "overwhelming scientific evidence" presented to the Commission to  
19 alert the public to serious concerns about the toxicity of organohalogen flame retardants  
20 added to children's products, furniture, mattresses and plastic casings surrounding  
21 electronics. The Commission requested that manufacturers eliminate the use of these  
22 chemicals in their products. It also recommended that retailers obtain assurance from  
23 manufacturers that their products do not contain these chemicals, and that consumers,  
24 especially those who are pregnant or with young children, avoid products containing these  
25 chemicals.

1  
2 (k) Effective July 1, 2017, California's Department of Toxic Substances Control  
3 identified children's foam-padded sleeping products containing TDCPP or TCEP as priority  
4 products for evaluation in connection with health hazards.

5 (l) Firefighters are at particular risk for exposure to flame retardants via inhalation and  
6 ingestion of smoke, dust, and debris from household products and insulation containing flame  
7 retardants. Elevated rates of cancer have been reported among firefighters; and studies have  
8 found firefighters' PBDE blood levels to be three times higher than levels in other Americans,  
9 and twice as high as levels among California residents.

10 (m) At least one study has demonstrated a correlation between household dust  
11 containing flame retardants and elevated levels of flame retardants in house cats' blood.  
12 These elevated levels of flame retardants have also been linked to higher incidence of feline  
13 hyperthyroidism.

14 (n) Flame retardant chemicals have been detected in the atmosphere, seawater,  
15 freshwater, sediments, and a variety of wildlife. Because they resist degradation and are  
16 capable of being transported long distances, flame retardant chemicals have been found in  
17 remote regions such as the Arctic and in deep sea life.

18 (o) Consumer products containing flame retardants may be discarded at landfills at the  
19 end of their useful lives. Flame retardants in landfills have been shown to contaminate landfill  
20 leachate and biosolids, and levels of flame retardants are higher in people and wildlife living  
21 near landfills.

22 (p) The federal government has failed to adequately regulate the use of flame  
23 retardant chemicals. In 2016, Congress passed the Frank R. Lautenberg Chemical Safety for  
24 the 21st Century Act, which adds to the responsibilities of the United States Environmental  
25 Protection Agency (EPA) under the federal Toxic Substances Control Act, codified in the

1 United States Code at Title 15, Chapter 53, to assess and regulate chemicals. The EPA has  
2 yet to restrict use of any flame retardant chemicals under this enactment.

3 (q) In the absence of federal action, California and other states have taken steps to  
4 limit or ban the use of certain flame retardant chemicals.

5 (r) The California Legislature in Health and Safety Code Section 108922 banned the  
6 commercial manufacture and distribution of products on or after June 1, 2006 that contain  
7 over a tenth of a percent of either of two brominated flame retardant chemicals, octa- and  
8 penta-brominated diphenyl ethers. However, many other flame retardant chemicals, such as  
9 known carcinogens TCEP and TDCPP, and highly persistent HBCD, remain in use. One  
10 2016 meta-analysis found 47 unique non-PBDE flame retardant chemicals in indoor house  
11 dust. Three of these chemicals were found in over 90% of samples, indicating that flame  
12 retardants are ubiquitous in indoor environments.

13 (s) A Consumer Product Safety Commission study found that there was no significant  
14 difference in fire safety between foams with added flame retardant chemicals formulated to  
15 pass TB 117, and foams not containing any flame retardant chemicals.

16 (t) BEARHFTI currently exempts the following types of juvenile product from State  
17 flammability standards: bassinets, highchair pads, nursing pads, booster seats, infant  
18 bouncers, nursing pillows, car seats, infant carriers, playpen side pads, changing pads, infant  
19 seats, playards, floor play mats, infant swings, portable hook-on chairs, highchairs, infant  
20 walkers, strollers.

21 (u) TB 117-2013 sets forth flammability standards, but does not govern the use of  
22 flame retardant chemicals. Some product manufacturers thus still opt to use flame retardant  
23 chemicals in upholstered furniture and juvenile products, even though these chemicals are not  
24 necessary for compliance with TB 117-2013.

1 (v) In 2014, California enacted Senate Bill 1019, requiring manufacturers of product  
2 items covered by TB 117-2013 to affix a label to each item disclosing whether the item  
3 contains or does not contain flame retardant chemical(s).

4 (w) Since 2015, the Department of the Environment has conducted outreach and  
5 provided technical assistance to retailers of upholstered furniture, encouraging them to sell  
6 furniture that is labeled as not containing chemical flame retardants. Approximately 55 out of  
7 200 retailers in San Francisco now sell a range of upholstered furniture items that are free of  
8 flame retardant chemicals at a variety of price points.

9 (x) The City has taken complementary steps in an effort to reduce San Franciscans'  
10 exposure to flame retardant chemicals. Pursuant to San Francisco's Environmentally  
11 Preferable Purchasing Ordinance in Chapter 2 of the Environment Code, some City contracts  
12 now limit the City from purchasing furniture containing flame retardant chemicals. Greater  
13 restrictions on sales in San Francisco of products containing flame retardant chemicals will  
14 facilitate the City's effort to avoid consumption of such products.

15 (y) With a Citywide restriction on sales of certain furniture and juvenile products that  
16 contain flame retardant chemicals, San Francisco can play a pivotal role in mitigating  
17 exposure to flame retardants and their adverse effects on people and animals in the City.  
18

19 Section 2. The Environment Code is hereby amended by adding Chapter 28,  
20 consisting of Sections 2801 through 2807, to read as follows:

21 **CHAPTER 28: FLAME RETARDANT CHEMICALS**

22 **IN UPHOLSTERED FURNITURE AND JUVENILE PRODUCTS**

23 **SEC. 2801. TITLE.**

24 *This Chapter 28 may be known as the "Flame Retardant Chemicals in Upholstered Furniture*  
25 *and Juvenile Products Ordinance."*

1 **SEC. 2802. DEFINITIONS.**

2 For the purposes of this Chapter 28, the following terms have the following meanings:

3 “Covered Product” means Upholstered Furniture, Reupholstered Furniture, or Juvenile  
4 Products, any component of which has been made with or contains a Flame Retardant Chemical at a  
5 level above 1,000 parts per million. Covered Products do not include (1) used or second-hand furniture  
6 that is not Reupholstered Furniture, or (2) used or second-hand Juvenile Products.

7 “Director” means the Director of the Department of the Environment.

8 “Establishment” means any store, stand, booth, concession, or any other business enterprise  
9 that engages in the Sale of Covered Products in San Francisco, and/or in the business of reupholstering  
10 residential furniture in San Francisco.

11 “Flame Retardant Chemical” means any chemical or chemical compound for which a  
12 functional use is to resist or inhibit the spread of fire. Flame Retardant Chemicals include, but are not  
13 limited to, halogenated, phosphorous based, nitrogen based, and nanoscale flame retardants; flame  
14 retardant chemicals listed as “designated chemicals” pursuant to Section 105440 of the California  
15 Health and Safety Code, as amended; and any chemical or chemical compound for which “flame  
16 retardant” appears on the substance Safety Data Sheet (“SDS”) pursuant to Section 1910.1200(g) of  
17 Title 29 of the Code of Federal Regulations, as amended.

18 “Juvenile Product” means a new, not previously owned product subject to the Home  
19 Furnishings and Thermal Insulation Act (Cal. Business and Professions Code Sec. 19000 et seq.) and  
20 designed for residential use by infants and children under 12 years of age, including but not limited to  
21 a bassinet, booster seat, changing pad, floor play mat, highchair, highchair pad, infant bouncer, infant  
22 carrier, infant seat, infant swing, infant walker, nursing pad, nursing pillow, playpen side pad, playard,  
23 portable hook-on chair, stroller, and children’s nap mat. Juvenile Products do not include:

24 (a) products that are not primarily intended for use in the home, such as products or  
25 components for motor vehicles, watercraft, aircraft, or other vehicles;

1 (b) products subject to Title 49, Part 571 of the Code of Federal Regulations regarding  
2 parts and products used in vehicles and aircraft;

3 (c) products required to meet federal flammability standards in Title 16, Parts 1632 or  
4 1633 of the Code of Federal Regulations regarding mattress products; and

5 (d) products required to meet State flammability standards in California Technical  
6 Bulletin 133, entitled "Flammability Test Procedure for Seating Furniture for Use in Public Occupancies."

7 "Reupholstered Furniture" means furniture whose original fabric, padding, decking, barrier  
8 material, foam, and/or other resilient filling has been replaced by an Establishment, that has not been  
9 Sold since the time of such replacement, and that is required to meet the flammability standards set  
10 forth in California Technical Bulletin 117-2013 entitled "Requirements, Test Procedure and Apparatus  
11 for Testing the Smolder Resistance of Materials Used in Upholstered Furniture." Reupholstered  
12 Furniture shall not include products required to meet California Technical Bulletin 133.

13 "Sale," or any of its variants, means any of the following, or combination thereof, undertaken  
14 by an Establishment: sell, offer for sale, transfer possession for compensation, trade, rent, lease, or  
15 otherwise give or distribute, and/or an intent to conduct any of these activities.

16 "Upholstered Furniture" means new, not previously owned seating made with soft materials,  
17 including but not limited to fabric, padding, decking, barrier material, foam, and/or other resilient  
18 filling, that is required to meet the flammability standards set forth in California Technical Bulletin  
19 117-2013 entitled "Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of  
20 Materials Used in Upholstered Furniture." Upholstered Furniture shall not include products required  
21 to meet California Technical Bulletin 133.

22  
23 **SEC. 2803. PROHIBITING THE SALE OF UPHOLSTERED FURNITURE AND JUVENILE**  
24 **PRODUCTS CONTAINING FLAME RETARDANT CHEMICALS.**

25 **(a) Restrictions.**



1 (1) Except as provided in subsection (a)(2), beginning January 1, 2019, no  
2 Establishment may Sell a Covered Product. In addition, except as provided in subsection (a)(2),  
3 beginning January 1, 2019, no Establishment may reupholster Upholstered Furniture or Reupholstered  
4 Furniture using soft material, including but not limited to fabric, padding, decking, barrier material,  
5 foam, and/or other resilient filling that contains or is made with a Flame Retardant Chemical at a level  
6 above 1,000 parts per million.

7 (2) The prohibitions set forth in subsection (a)(1) shall apply to Covered  
8 Products with electrical or electronic components beginning July 1, 2019.

9 (b) Compliance. Compliance with Section 2803(a) with respect to each Covered Product shall  
10 be determined in accordance with the following. For Upholstered Furniture and Reupholstered  
11 Furniture, Establishments shall ensure that every item they Sell is affixed with a label that (1) meets the  
12 requirements of Senate Bill 1019, and (2) states that the item does not contain Flame Retardant  
13 Chemical(s). For each Juvenile Product, an Establishment may demonstrate compliance by retaining  
14 on file and making available for inspection upon request a written statement from the product supplier  
15 attesting that the Juvenile Product does not contain a Flame Retardant Chemical. The Director of the  
16 Department of the Environment shall, in his or her lawful discretion, have authority to set forth in  
17 regulations additional methods by which Establishments may demonstrate compliance with this  
18 Chapter 28.

19 (c) Petitions. Notwithstanding subsections (a) and (b), beginning on July 1, 2018, an  
20 Establishment or other person subject to the restrictions in this Chapter 28 may, in writing,  
21 petition the Director of the Department of the Environment for a waiver from strict compliance with  
22 this Chapter for an Establishment or a Covered Product, where the Establishment petitioner can  
23 demonstrate that strict compliance shall cause severe hardship or practical difficulty, or would not be  
24 feasible. Any waiver shall be crafted as narrowly as possible, to maximize compliance as required by  
25 this Chapter 28, and shall be in writing. A petition that does not receive a response from the

1 Department within 60 days from when it was received by the Department shall be deemed granted. By  
2 no later than June 30, 2018, the Department of the Environment shall issue rules or  
3 regulations establishing a process for the Department's review of petitions and describing  
4 factors that the Department will consider in evaluating petitions.

5 (d) Five years from this Chapter 28's effective date, the Director of the Department of the  
6 Environment shall evaluate the efficacy of this Chapter in reducing San Franciscans' exposure to flame  
7 retardant chemicals, and shall submit a written report based on the evaluation to the Mayor and the  
8 Board of Supervisors, with recommendations, if any, for changes in City laws or programs to achieve  
9 greater reduction in San Franciscans' exposure to flame retardant chemicals.

10 **SEC. 2804. IMPLEMENTATION AND ENFORCEMENT.**

11 (a) The Director of the Department of the Environment may issue rules and regulations  
12 necessary or appropriate for the implementation and enforcement of this Chapter 28.

13 (b) If the Director determines that any person has violated this Chapter 28, or a regulation  
14 adopted pursuant to this Chapter 28, the Director shall send a written warning, as well as a copy of  
15 this Chapter 28 and any regulations adopted pursuant to it, to the person who violated the Chapter or  
16 regulation. The person shall have 30 days after receipt of the warning to correct the violation.

17 (c) If the person in violation fails to correct the violation, the Director may impose an  
18 administrative fine for the violation. Administrative Code Chapter 100, "Procedures Governing the  
19 Imposition of Administrative Fines," as amended from time to time, is hereby incorporated in its  
20 entirety and shall govern the imposition, enforcement, collection, and review of administrative citations  
21 issued to enforce this Chapter 28 or any rule or regulation adopted pursuant to this Chapter. Each  
22 Covered Product item Sold or for Sale on each day shall constitute a separate violation for these  
23 purposes.

24 (d) The City Attorney or any organization with tax exempt status under 26 United States Code  
25 Section 501(c)(3) or 501(c)(4) and with a primary mission of protecting human health and/or the

1 environment in the San Francisco Bay Area may bring a civil action to enjoin a violation of or compel  
2 compliance with any requirement of this Chapter 28 or any rule or regulation adopted pursuant to this  
3 Chapter 28, as well as for payment of civil penalties and any other appropriate remedy. The court  
4 shall award reasonable attorney fees and costs to the City Attorney or nonprofit organization that is the  
5 prevailing party in a civil action brought under this Chapter 28. A nonprofit organization may institute  
6 a civil action under this subsection (e) only if:

7 (1) The nonprofit organization has filed a complaint with the Director;

8 (2) 90 days have passed since the filing of the complaint;

9 (3) After such 90-day period, the nonprofit organization provides written notice to the  
10 Director and the City Attorney's Office of its intent to initiate civil proceedings;

11 (4) The Director has not issued a determination that there has been no violation of any  
12 requirement of this Chapter 28; and

13 (5) The City Attorney's Office has not provided written notice to the nonprofit  
14 organization of the City's intent to initiate civil proceedings within 90 days of receipt of the written  
15 notice from the nonprofit organization referenced in subsection (d)(3).

16 (e) Any person in violation of this Chapter 28 or any rule or regulation adopted pursuant to  
17 this Chapter 28 shall be liable to the City for a civil penalty in an amount not to exceed \$1,000 per day  
18 per violation. Each day on which the violation continues shall constitute a separate violation; and each  
19 Covered Product item for Sale shall also constitute a separate violation. Civil penalties shall not be  
20 assessed pursuant to this Chapter 28 for the same violation for which the Director has assessed an  
21 administrative penalty pursuant to this Chapter 28.

22 (f) In determining the appropriate civil or administrative penalty, the court or the Director  
23 shall consider the extent of harm caused by the violation, the nature and persistence of the violation,  
24 the frequency of past violations, any action taken to mitigate the violation, and the financial burden to  
25 the violator.

1            (g) No ~~criminal~~, civil, or administrative action under this Chapter 28 may be brought more  
2 than one year after the date of the alleged violation.

3 **SEC. 2805. UNDERTAKING FOR THE GENERAL WELFARE.**

4            In adopting this Chapter 28, the City is assuming an undertaking only to promote the general  
5 welfare. It is not assuming, nor is it imposing on its officers and employees, an obligation for breach of  
6 which it is liable in money damages to any person who claims that such breach proximately caused  
7 injury.

8 **SEC. 2806. NO CONFLICT WITH FEDERAL OR STATE LAW.**

9            This Chapter 28 shall be construed so as not to conflict with applicable federal or State laws,  
10 rules, or regulations. Nothing in this Chapter 28 shall authorize any City agency or department to  
11 impose any duties or obligations in conflict with limitations on municipal authority established by State  
12 or federal law at the time such agency or department action is taken. The City shall suspend  
13 enforcement of this Chapter 28 to the extent that said enforcement would conflict with any preemptive  
14 State or federal legislation subsequently adopted.

15 **SEC. 2807. SEVERABILITY.**

16            If any of the provisions of this Chapter 28 or the application thereof to any person or  
17 circumstance is held invalid, the remainder of those provisions, including the application of such part  
18 or provisions to persons or circumstances other than those to which it is held invalid, shall not be  
19 affected thereby and shall continue in full force and effect. To this end, the provisions of this Chapter  
20 28 are severable.

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1 Section 3. Effective Date. This ordinance shall become effective 30 days after  
2 enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the  
3 ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board  
4 of Supervisors overrides the Mayor's veto of the ordinance.

5  
6 APPROVED AS TO FORM:  
DENNIS J. HERRERA, City Attorney

7  
8 By:

  
9 NEHA GUPTA  
Deputy City Attorney

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**City and County of San Francisco**  
**Tails**  
**Ordinance**

City Hall  
1 Dr. Carlton B. Goodlett Place  
San Francisco, CA 94102-4689

**File Number:** 170867

**Date Passed:** October 24, 2017

Ordinance amending the Environment Code to ban the sale in San Francisco of upholstered furniture and juvenile products made with or containing an added flame retardant chemical.

October 11, 2017 Public Safety and Neighborhood Services Committee -  
RECOMMENDED

October 17, 2017 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE  
BEARING SAME TITLE

Ayes: 11 - Breed, Cohen, Farrell, Fewer, Kim, Peskin, Ronen, Safai, Sheehy,  
Tang and Yee

October 17, 2017 Board of Supervisors - PASSED ON FIRST READING AS AMENDED

Ayes: 11 - Breed, Cohen, Farrell, Fewer, Kim, Peskin, Ronen, Safai, Sheehy,  
Tang and Yee

October 24, 2017 Board of Supervisors - FINALLY PASSED

Ayes: 11 - Breed, Cohen, Farrell, Fewer, Kim, Peskin, Ronen, Safai, Sheehy,  
Tang and Yee

File No. 170867

I hereby certify that the foregoing  
Ordinance was FINALLY PASSED on  
10/24/2017 by the Board of Supervisors of  
the City and County of San Francisco.

Angela Calvillo  
Clerk of the Board

Mayor

11/03/17

Date Approved