

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 ~~*italics Times New Roman font*~~.
9 **Board amendment additions** are in Arial font.
10 **Board amendment deletions** are in ~~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 development and adoption of California Technical Bulletin
23 117 (TB 117) in 1975 setting forth flammability standards, flame retardant chemicals have
24 been routinely used in upholstered furniture and certain juvenile products to meet TB 117's
25 open-flame standard. This standard has been revised in recent years.

1 (c) Scientists have found that several brominated, organohalogen, and
2 organophosphorous flame retardant chemicals deemed beneficial for fire safety exhibit one or
3 more of the key characteristics of a class of synthetic organic compounds commonly referred
4 to as Persistent Organic Pollutants (POPs), in that they are bio-accumulative, persistent,
5 capable of long range transport, and/or toxic.

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

9 (e) Another Duke University-led study published in 2011 revealed that foam in 80% of
10 tested baby products contained toxic or potentially harmful flame retardant chemicals, and
11 that the most commonly occurring flame retardant in these products was tris(1,3-
12 dichlorisopropyl) phosphate (TDCPP). Furthermore, testing by the Washington Department of
13 Ecology published in the Department's report to the Washington State legislature and most
14 recently updated in 2015 uncovered a variety of flame retardants in children's products and
15 upholstered furniture, including six halogenated flame retardants: tris(1,3-dichloro-
16 2propyl)phosphate (TDCPP); tris(2-chloroethyl) phosphate (TCEP); tris(1-chloro-2-
17 propyl)phosphate (TCPP); 2,2-bis(chloromethyl)-propane-1,3-diyltetrakis(2-chloroethyl)
18 bisphosphate (V6); 2,3,4,5-tetrabromo-ethylhexylbenzoate (TBB); bis(2-ethylhexyl)-2,3,4,5-
19 tetrabromophthalate (TBPH) and two phosphate-based chemicals, triphenyl Isopropylated
20 triphenyl phosphate (IPTPP) and phosphate (TPP).

21 (f) Most flame retardant chemicals are semi-volatile, and are released over time from
22 the consumer products that contain them. Inhalation and ingestion of indoor dust is a
23 common route of human exposure to flame retardant chemicals. Studies have shown that
24 indoor dust contains anywhere from 1.5 to 50 times greater concentration of flame retardant
25

1 chemicals than the outdoor environment. Given that humans spend 80% of their time indoors,
2 human exposure to flame retardants can be significant.

3 (g) A 2010 National Health and Nutrition Examination Survey conducted by the
4 National Center for Health Statistics detected polybrominated diphenyl ether (PBDE) flame
5 retardants in the blood of 97% of those surveyed. Children living in California have some of
6 the highest documented blood PBDE concentrations of any population studied.

7 (h) Scientists recognize the urgency to reduce the exposure of vulnerable populations,
8 particularly young children, to flame retardant chemicals. A consensus statement issued by
9 the Project Targeting Environmental Neurodevelopmental Risks (Project TENDR) found that
10 PBDEs are associated with neurodevelopmental disorders in children, and that the effects of
11 non-PBDE replacements with similar chemical structures have not been adequately tested.

12 (i) 1,3-dichloro-2 propyl phosphate (TDCPP) has been linked to cancer, as well as
13 repercussions on both reproductive health and embryo development.

14 (j) In 2006, the federal Consumer Product Safety Commission (CPSC) released a risk
15 assessment of flame retardant chemicals in upholstered furniture foam concluding that
16 “upholstered furniture manufactured with TDCPP treated foam might present a hazard to
17 consumers based on both cancer and non-cancer endpoints.”

18 (k) Effective July 1, 2017, California’s Department of Toxics Substances Control
19 identified children’s foam-padded sleeping products containing TDCPP or TCEP as priority
20 products for evaluation in connection with health hazards. In addition, TDCPP is listed on
21 California’s Proposition 65 list of chemicals known to cause cancer, birth defects, or other
22 reproductive harm.

23 (l) Firefighters are at particular risk for exposure to flame retardants via inhalation and
24 ingestion of smoke, dust, and debris from household products and insulation containing flame
25 retardants. Elevated rates of cancer have been reported among firefighters; and studies have

1 found firefighters' PBDE blood levels to be three times higher than levels in other Americans,
2 and twice as high as levels among California residents.

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

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

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

15 (p) The federal government has failed to adequately regulate the use of flame
16 retardant chemicals. In 2016, Congress passed the Frank R. Lautenberg Chemical Safety for
17 the 21st Century Act, which adds to the responsibilities of the United States Environmental
18 Protection Agency (EPA) under the federal Toxic Substances Control Act, codified in the
19 United States Code at Title 15, Chapter 53, to assess and regulate chemicals. As required by
20 the new law, in December 2016, the EPA identified the first ten chemicals it will evaluate for
21 potential harm to human health and the environment. Among the ten, the EPA only included
22 a single flame retardant chemical, Cyclic Aliphatic Bromides Cluster (HBCD cluster), for risk
23 evaluation.

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

1 (r) The California Legislature in Health and Safety Code Section 108922 banned the
2 commercial manufacture and distribution of products on or after June 1, 2006 that contain
3 over a tenth of a percent of either of two brominated flame retardant chemicals, octa- and
4 penta-brominated diphenyl ethers. However, other flame retardant chemicals, such as known
5 carcinogens TCEP and TDCPP, and highly persistent HBCD, remain in use.

6 (s) In 2013, BEARHFTI updated its 1975 flammability standard in TB 117 such that it is
7 no longer necessary to use flame retardant chemicals to meet California's updated standard
8 for certain products, as set forth in TB 117-2013.

9 (t) A CPSC study found that there was no significant difference between foams with
10 added flame retardants formulated to pass TB 117, and foams not containing any flame
11 retardants.

12 (u) Effective January 2014, BEARHFTI exempted 15 juvenile products from meeting
13 the TB 117-2013 flammability standard, bringing the total to 18 juvenile products: bassinets,
14 highchair pads, nursing pads, booster seats, infant bouncers, nursing pillows, car seats, infant
15 carriers, playpen side pads, changing pads, infant seats, playards, floor play mats, infant
16 swings, portable hook-on chairs, highchairs, infant walkers, strollers.

17 (v) TB 117-2013 does not ban or restrict the use of flame retardant chemicals. Some
18 product manufacturers thus still use flame retardant chemicals in upholstered furniture and
19 juvenile products, even though these chemicals are no longer necessary to meet the
20 flammability standard.

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

24 (x) Since 2015, the Department of the Environment has conducted outreach and
25 provided technical assistance to retailers of upholstered furniture, encouraging them to sell

1 furniture that is labeled as not containing chemical flame retardants. Approximately 50
2 retailers in San Francisco now sell a range of upholstered furniture items that are free of flame
3 retardant chemicals at a variety of price points.

4 (y) Pursuant to San Francisco’s Environmentally Preferable Purchasing Ordinance in
5 Chapter 2 of the Environment Code, some City contracts now limit the City from purchasing
6 furniture containing flame retardant chemicals.

7 (z) San Francisco can play a pivotal role in mitigating exposure to flame retardants and
8 their adverse effects on people and animals in the City.

9
10 Section 2. The Environment Code is hereby amended by adding Chapter 28,
11 consisting of Sections 2801 through 2807, to read as follows:

12 **CHAPTER 28: FLAME RETARDANT CHEMICALS**

13 **IN UPHOLSTERED FURNITURE AND JUVENILE PRODUCTS**

14 **SEC. 2801. TITLE.**

15 *This Chapter 28 may be known as the “Flame Retardant Chemicals in Upholstered Furniture*
16 *and Juvenile Products Ordinance.”*

17 **SEC. 2802. DEFINITIONS.**

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

19 *“Covered Product” includes the following: Upholstered Furniture, Reupholstered Furniture,*
20 *flexible polyurethane foam Sold and/or used for reupholstering residential furniture, and Juvenile*
21 *Products.*

22 *“Director” means the Director of the Department of the Environment.*

23 *“Establishment” means any store, stand, booth, concession, or any other business enterprise*
24 *that engages in the Sale of Covered Products in San Francisco, and/or in the business of reupholstering*
25

1 furniture in San Francisco. Establishment shall not include organizations with tax exempt status under
2 26 United States Code Section 501(c)(3) or 501(c)(4).

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

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

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

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

20 (c) products required to meet federal flammability standards in Title 16, Parts 1632 or
21 1633 of the Code of Federal Regulations regarding mattress products; and

22 (d) products required to meet State flammability standards in California Technical
23 Bulletin 133, entitled “Flammability Test Procedure for Seating Furniture for Use in Public Occupancies.”

24 “Reupholstered Furniture” means furniture for Sale by an Establishment whose original foam
25 padding has been replaced with new polyurethane foam, and has not been Sold since the time of such

1 replacement. Reupholstered Furniture shall not include products required to meet California
2 Technical Bulletin 133.

3 “Sale,” or any of its variants, means any of the following, or combination thereof, undertaken
4 by an Establishment: sell, offer for sale, transfer possession for compensation, trade, rent, consign,
5 lease, deliver, or otherwise give or distribute, and/or an intent to conduct any of these activities.

6 “Upholstered Furniture” means new, not previously owned seating covered with soft materials,
7 including but not limited to fabric, padding, and/or foam, for residential indoor use in a home or other
8 dwelling intended for residential occupancy, that contains flexible polyurethane foam and is required
9 to meet the flammability standards set forth in California Technical Bulletin 117-2013 entitled
10 “Requirements, Test Procedure and Apparatus for Testing the Smolder Resistance of Materials Used in
11 Upholstered Furniture.” Upholstered Furniture shall not include products required to meet California
12 Technical Bulletin 133.

13 **SEC. 2803. PROHIBITING THE SALE OF UPHOLSTERED FURNITURE AND JUVENILE**
14 **PRODUCTS CONTAINING FLAME RETARDANT CHEMICALS.**

15 (a) Beginning one year from the effective date of this Chapter 28, no Establishment may Sell
16 any product that the Establishment knows or should know is a Covered Product, any component of
17 which has been made with or contains a Flame Retardant Chemical at a level above 1,000 parts per
18 million. This prohibition shall not apply to (1) used or second-hand furniture that is not Reupholstered
19 Furniture and (2) used or second-hand Juvenile Products.

20 (b) Beginning one year from the effective date of this Chapter 28, no Establishment in San
21 Francisco engaged in reupholstering furniture may sell and/or use flexible polyurethane foam
22 containing above 1,000 parts per million of any Flame Retardant Chemical, for the purpose of
23 replacing the foam in any piece of Upholstered Furniture.

24 (c) Notwithstanding subsections (a) and (b), an Establishment subject to the restrictions in this
25 Chapter 28 may petition the Director of the Department of the Environment to receive additional time

1 for compliance with this Chapter, where the Establishment can demonstrate that timely compliance
2 shall cause severe hardship or is otherwise infeasible. Such petitions must be submitted in writing, and
3 shall be evaluated and granted or denied, in whole or part, on a case-by-case basis at the discretion of
4 the Director or his/her designee. A petition that does not receive a response from the Department
5 within 90 days from when it was received by the Department shall be deemed granted.

6 (d) The Director of the Department of the Environment shall, after a public hearing, develop
7 and from time to time amend a list of Flame Retardant Chemical(s) deemed non-harmful based on
8 scientific evidence, establish criteria all chemicals on this list must meet, and publish both the list and
9 criteria on its website. Sales of Covered Products that contain only Flame Retardant Chemical(s)
10 appearing on that list shall be exempt from the requirements of this Chapter 28.

11 (e) Five years from this Chapter 28's effective date and once every two years thereafter, the
12 Director of the Department of the Environment shall evaluate the efficacy of this Chapter in reducing
13 San Franciscans' exposure to flame retardant chemicals, and shall submit a written report based on
14 the evaluation to the Mayor and the Board of Supervisors, with recommendations, if any, for changes in
15 City laws or programs to achieve greater reduction in San Franciscans' exposure to flame retardant
16 chemicals.

17 **SEC. 2804. IMPLEMENTATION AND ENFORCEMENT.**

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

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

24 (c) If the person in violation fails to correct the violation, the Director may impose an
25 administrative fine for the violation. Administrative Code Chapter 100, "Procedures Governing the

1 Imposition of Administrative Fines," as amended from time to time, is hereby incorporated in its
2 entirety and shall govern the imposition, enforcement, collection, and review of administrative citations
3 issued to enforce this Chapter 28 or any rule or regulation adopted pursuant to this Chapter. Each
4 Covered Product item Sold or for Sale on each day shall constitute a separate violation for these
5 purposes.

6 (d) The City Attorney or any organization with tax exempt status under 26 United States Code
7 Section 501(c)(3) or 501(c)(4) and with a primary mission of protecting human health and/or the
8 environment in the San Francisco Bay Area may bring a civil action to enjoin a violation of or compel
9 compliance with any requirement of this Chapter 28 or any rule or regulation adopted pursuant to this
10 Chapter 28, as well as for payment of civil penalties and any other appropriate remedy. The court
11 shall award reasonable attorney fees and costs to the City Attorney or nonprofit organization that is the
12 prevailing party in a civil action brought under this Chapter 28. A nonprofit organization may institute
13 a civil action under this subsection (e) only if:

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

15 (2) 90 days have passed since the filing of the complaint;

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

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

20 (5) The City Attorney's Office has not provided written notice to the nonprofit
21 organization of the City's intent to initiate civil proceedings within 30 days of receipt of the written
22 notice from the nonprofit organization referenced in subsection (d)(3).

23 (e) Any person in violation of this Chapter 28 or any rule or regulation adopted pursuant to
24 this Chapter 28 shall be liable to the City for a civil penalty in an amount not to exceed \$1,000 per day
25 per violation. Each day on which the violation continues shall constitute a separate violation; and each

1 Covered Product item for Sale shall also constitute a separate violation. Civil penalties shall not be
2 assessed pursuant to this Chapter 28 for the same violation for which the Director has assessed an
3 administrative penalty pursuant to this Chapter 28.

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

8 (g) No criminal, civil, or administrative action under this Chapter 28 may be brought more
9 than four years after the date of the alleged violation.

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

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

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

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

22 **SEC. 2807. SEVERABILITY.**

23 If any of the provisions of this Chapter 28 or the application thereof to any person or
24 circumstance is held invalid, the remainder of those provisions, including the application of such part
25 or provisions to persons or circumstances other than those to which it is held invalid, shall not be

1 affected thereby and shall continue in full force and effect. To this end, the provisions of this Chapter
2 28 are severable.

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

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9
10 APPROVED AS TO FORM:
11 DENNIS J. HERRERA, City Attorney

12 By: _____
13 NEHA GUPTA
14 Deputy City Attorney

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