

# San Francisco Department of the Environment Regulation #SFE 2018-01-PPO/GBRCBO Adopting Approved Alternative Products for Sustainable Carpet for City Departments

(Environmentally Preferable Purchasing/Precautionary Purchasing Ordinance No. 115-05 and Green Building Requirements for Municipal Buildings Ordinance No. 52-17)

Regulation Effective Date: March 9, 2018

## A. Authorization

The Environmentally Preferable Purchasing/Precautionary Purchasing Ordinance was signed by the Mayor on June 17, 2005, and became effective July 18, 2005. It is codified as Chapter 2 of the Environment Code ("Chapter 2"). Chapter 2 contains a comprehensive system to identify and purchase environmentally preferable products, and applies to all commodity purchases by city departments governed by Chapter 21 of the Administrative Code. Chapter 2 also requires the Director of the Department of the Environment ("Director") to consolidate existing environmentally preferable purchasing requirements from other Code sections into regulations.

The Green Building Requirements for Municipal Buildings Ordinance (GBRMB Ordinance) was signed by Mayor Lee on March 17, 2017 and became effective on April 16, 2017. The GBRMB Ordinance amended various sections of Chapter 7 of the Environment Code ("Chapter 7"), which is implemented by the Department of the Environment ("Department"), with oversight by the Municipal Green Building Task Force. Chapter 7 requires LEED Gold Certification for municipal construction projects; provides for collection, storage and loading of recyclable and compostable materials for City departments; requires diverting debris generated at City construction and/or demolition projects from landfill; establishes water conservation and energy efficient lighting retrofit and indoor environmental quality requirements; and requires that purchases of certain products made by or on behalf of City departments, including carpet, comply with regulations pertaining to certain environmental attributes.

The Director of the Department of the Environment promulgates these regulations pursuant to her authority to adopt regulations necessary to implement Chapters 2 and 7 of the Environment Code, as set forth in Environment Code Sections 203(d) and 703(b), respectively.

## B. Scope

These regulations apply to all purchases of carpet for installation in municipal construction projects, as defined in Chapter 7, Section 701, and to other purchases of carpet by City Departments under Chapter 2, Section 204. These regulations set forth the minimum requirements for environmentally preferable carpet products approved for City purchase. These regulations do not duplicate Chapters 2 or 7 and must be read together with those chapters of the Environment Code, including the definitions, requirements pertaining to waivers, and enforcement mechanisms set forth in those ordinances. Unless otherwise defined below, terms used in this regulation shall have the same meanings as in Chapters 2 and 7.

Products compliant with these regulations are synonymous with the "approved alternatives list" per Chapter 2. These compliant products are listed as "REQUIRED" on the City's green purchasing website at [SFApproved.org](http://SFApproved.org).

## C. Definitions

**Antimicrobial chemicals:** Chemicals intended to disinfect, sanitize, reduce, or mitigate growth or development of microbiological organisms, or protect inanimate objects, industrial processes or systems, surfaces, water, or other chemical substances from contamination, fouling, or deterioration caused by bacteria, viruses, fungi, protozoa, algae, or slime.

**Broadloom carpet:** Carpet that is woven on a wide loom or is machine-tufted, shipped in rolls.

**Flame retardant chemicals:** Any chemical or chemical compound for which a functional use is to resist or inhibit the spread of fire. Flame retardant chemicals include, but are not limited to, antimony-based, halogenated, phosphorous-based, nitrogen-based, and nanoscale flame retardants, flame retardant chemicals listed as “designated chemicals” pursuant to Section 105440 of the California Health and Safety Code, as amended; and any chemical or chemical compound for which “flame retardant” appears on the substance Safety Data Sheet (SDS) pursuant to Section 1910.1200(g) of Title 29 of the Code of Federal Regulations, as amended. “Added flame retardant chemicals” means flame retardant chemicals that are present in any covered product or component thereof at levels above 1,000 ppm.

**Per- and Poly-Fluoroalkyl Substances (PFASs, often referred to as PFCs):** A category of compounds that includes long- and short-chain per- and poly-fluorinated alkyl compounds, fluorinated sulfonate compounds, and fluorinated polymers. PFASs include any compound that meets any one of the following definitions:

- Perfluoroalkyl substances: Compounds for which all hydrogen atoms on all carbon atoms (except for carbons associated with functional groups) have been replaced by fluorine atoms.
- Polyfluoroalkyl substances: Compounds for which hydrogen atoms on at least one, but not all, carbon atoms have been replaced by fluorine atoms.
- Fluoropolymers: Carbon-only polymer backbone with fluorine atoms directly bound to the polymer backbone.
- Perfluoropolyethers: Carbon and oxygen polymer backbone with fluorine atoms directly bound to carbon atoms.
- Side-chain fluorinated polymers: Variable composition non-fluorinated polymer backbone with fluorinated side chains.

**Volatile Organic Compounds (VOCs):** VOCs are defined by the California Standard Method for Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers as carbon-containing compounds (excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates and ammonium carbonate) with vapor pressures at standard conditions approximately ranging between those for n-pentane through n-heptadecane. Formaldehyde and acetaldehyde are considered to be VOCs.

#### **D. Requirements**

All carpet purchases for City projects shall comply with the below requirements or must have received a waiver granting approval prior to purchase (see Section E, below). Carpet purchased pursuant to a waiver must still meet the VOC requirements under Item D.2(c), below.

1. **Prohibited products:** The following products are prohibited from purchase.
  - (a) Broadloom carpets, unless their installation qualifies as a waived category in Item E.2 below *and* meets the broadloom requirements under Item D.3 below;
  - (b) Cushion-backed carpet tiles.
2. **Carpet tiles shall:**
  - (a) Be commercial hard-backed carpet tiles;
  - (b) Be Cradle to Cradle Certified™ (C2CC) Silver or higher under v3.1 or newer;
  - (c) Meet Carpet and Rug Institute (CRI) Green Label Plus certification or other certifications of compliance with the California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, also known as CDPH/EHLB Standard Method v1.1 or California Specification 01350 (referred to herein as “VOC requirements”);
  - (d) Have an Environmental Product Declaration® (EPD) following a US or international carpet product category rule (PCR) that conforms to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and has at least a cradle to gate scope;
  - (e) Have a compliant Health Product Declaration® (HPD) with content characterized, screened, and inventoried to at least 1,000 ppm under v2.0 or newer; or a Living Building Challenge Compliant (LBCC) Declare<sup>SM</sup> label;
  - (f) Contain no intentionally added:
    - i) Antimicrobials at or above 100 parts per million (ppm)
    - ii) Flame retardant chemicals

- iii) PFASs, such as those commonly used as stain, water, or oil resistance treatments
- (g) Contain a minimum of 45% total recycled content, of which at least 10% shall be post-consumer;
- (h) Carpet yarn shall be:
  - i) Type 6 or 6,6 cationic nylon
  - ii) 100% solution-dyed
- (i) Carpet backing shall be free of:
  - i) Coal fly-ash
  - ii) Polyvinyl chloride (PVC)
  - iii) Polyurethane
  - iv) Synthetic styrene butadiene latex

3. **Broadloom carpets** are prohibited unless they meet the criteria for waived categories in Item E.2 below. If exempted, broadloom products must be commercial-grade carpets, and must meet the same criteria as carpet tiles in Item D.2 above, with the exception of the recycled content requirement D.2(g).

4. **Carpet tile adhesives**

- (a) Shall meet:
  - i) CRI Green Label Plus certification
  - ii) California Department of Public Health (CDPH) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers (also known as CDPH/EHLB Standard Method v1.1 or California Specification 01350)
- (b) Carpet tile tape adhesives shall also have a Bronze level or higher Material Health Certificate (MHC) from Cradle to Cradle Products Innovation Institute (C2CPPI) under v3.1 or newer;
- (c) Carpet tile wet adhesives shall also:
  - i) Have a Silver level or higher MHC from C2CPPI under v3.1 or newer
  - ii) Meet South Coast Air Quality Management District (SCAQMD) Rule 1168 (2005) for wet adhesives (< 50g/l)

5. **Broadloom adhesives** shall meet CRI Green Label Plus certification.

6. **Products and packaging** must comply with all federal, state and local regulations. In particular, California's Toxics in Packaging Prevention Act (Health and Safety Code - HSC Division 20, Chapter 6.5, Article 10.4) requires that packaging shall not contain any intentionally introduced cadmium, lead, mercury, or hexavalent chromium. In addition, this law limits the incidental presence of these regulated metals to not more than 100 parts per million (ppm) by weight.

E. **Waivers**

1. **An approved waiver is required for the purchase of any carpet product that is not compliant with the standards set forth in this regulation (under Environment Code Chapter 2 or 7).** Except as noted below in Item E.2, City Departments must request waivers in the following manner:

- (a) For approval of purchases under Chapter 7 of the Environment Code (e.g., public works, construction, or improvement projects) that do not comply with this regulation, City Departments must seek a waiver from the Municipal Green Building Task Force, according to Environment Code Chapter 7 Section 713, prior to making the purchase;
- (b) For approval of purchases under Chapter 2 of the Environment Code (commodities and services) that do not comply with this regulation, City Departments must seek a waiver from the Office of Contract Administration, according to Environment Code Chapter 2 Section 206, prior to making the purchase.

2. **An approved waiver is hereby granted for a purchase that falls within one of the below waived categories.** City Departments who determine that a carpet purchase pursuant to Chapter 2 or Chapter 7 falls within one of the

below waived categories of carpet purchase types need not submit a waiver request in accordance with Item E.1.

- (a) Area rugs;
- (b) Patch replacements for existing carpet;
- (c) Renovations that require replacement carpet of a specific thickness, where replacement carpet that both is the required thickness and meets the requirements of Item D, cannot reasonably be obtained;
- (d) Carpet for historic spaces, where the San Francisco Historic Preservation Commission or some other public policy body must approve the carpet, and carpet that complies with the requirements herein would necessarily fail to meet the standards of such a body.

- 3. All carpets must meet VOC requirements, regardless of waivers.** Carpets purchased under an approved waiver (pursuant to Item E.1 or Item E.2 above) must still meet the VOC requirements under Item D.2(c) above, even though they are otherwise exempt from all other requirements set forth in this Item D.

#### **F. Enforcement**

This regulation has the full force and effect of law. A violation of this regulation is enforceable pursuant to Environment Code Section 208.

The Director of the Department of the Environment hereby adopts these regulations, effective as of the date specified below.

Deborah O. Raphael  
Director, Department of the Environment

**Approved:**



**Date:**

March 9, 2018