TECHNICAL SPECIFICATIONS FOR CHEMICALLY SAFER COMMERCIAL FURNITURE AND FABRICS

For Invitations to Bid and Requests for Proposals

CEH CENTER for ENVIRONMENTAL HEALTH
Technical Specifications for Chemically Safer Commercial Furniture and Fabrics

For use in: Invitations to Bid and Requests for Proposals

All furniture, including fabrics used for upholstery and reupholstery of furniture, supplied under this Price Agreement, shall comply with the restrictions of the chemicals of concern listed below.

All suppliers, vendors, or distributors (“vendor”) participating in the bid must provide verification of compliance with the chemical restrictions at the product-level using one of the two compliance options outlined herein.

Verification of compliance shall be provided to [purchasing entity] during the bid process along with pricing review. If a new product is submitted for contract inclusion during the contract term, or purchase by [purchasing entity], verification of compliance must be provided along with pricing, and be approved prior to the delivery of any product to [purchasing entity].

Salvaged and refurbished furniture more than one-year old at the time of reuse is considered compliant, provided that any site-applied paints, coatings, adhesives, and sealants meet the following requirements.

Compliance Options

1. Products that meet one of the following two options will be deemed to be in compliance with these specifications.
   a. Product is certified by the BIFMA LEVEL program as meeting Criterion, 7.4.4, “Targeted Chemicals for Elimination” of the ANSI/BIFMA e-3 2019 Furniture Sustainability Standard. Examples of certifying bodies may be SCS Global Services or ULL LLC.
   b. Product is certified by the GreenScreen Certification standard for Furniture and Textiles Version 1 (or newer) at the bronze level or higher and is listed on the GreenScreen Furniture and Fabric Certification list of certified products.

2. Products that comply with all chemicals of concern restrictions listed in sections a-e (Flame Retardants through PVC).
   a. Flame Retardant Chemicals

   All furniture supplied under this Price Agreement must contain less than 1,000 parts per million of flame retardant chemicals in both standard and optional components, excluding electrical components.

   Where flame retardant chemicals are required to meet code or regulation (e.g., TB 133 or ASTM E1537), upholstered furniture and its fabrics must have less than 1,000 parts per million of a halogenated flame retardant chemical by weight of the homogeneous material, excluding electrical components. Products that contain flame retardant
chemicals that have been fully assessed using GreenScreen v1.2 (or newer) and meet the criteria for Benchmark 2, 3, or 4 are preferred.

All upholstered seating (excluding products required to meet TB 133 or ASTM E1537) under this Price Agreement must meet the following requirements:

1. Prior to June 25, 2022:
   a. Product must be labeled as complying with TB 117-2013 consistent with the manner described in Section 19094 of the California Business and Professions Code and all products must be labeled as not containing added flame retardant chemicals.
   b. Additional wording may be added to the bottom of the TB 117-2013 label that states “Complies with the U.S. CPSC requirements for upholstered furniture flammability “.

As of June 25, 2022 or later:
   a. Product must be labeled as complying with TB 117-2013 consistent with the manner described in Section 19094 of the California Business and Professions Code and all products must be labeled as not containing added flame retardant chemicals, AND
   b. In accordance with 16 CFR Part 1640 the product must be labeled as “Complies with the U.S. CPSC requirements for upholstered furniture flammability “. This wording may be located on a separate permanent label from the TB 117-2013 label or the following wording “Complies with the U.S. CPSC requirements for upholstered furniture flammability“ may be added to the bottom of the TB 117-2013 label.

b. Formaldehyde and Volatile Organic Compounds (VOCs)

All furniture supplied under this Price Agreement shall comply with ANSI/BIFMA e3-2019 Furniture Sustainability Standard, Sections 7.6.1, 7.6.2 using either the concentration modeling approach or the emissions factor approach. Test results shall be modeled using the open plan, private office, or seating scenario in ANSI/BIFMA M7.1, as appropriate OR Certified Greenguard Gold or Certified SCS Indoor Advantage Gold. Furniture products that comply with California Department of Public Health Standard Method v1.2 (or newer) emission testing method for California Section 01350 are considered equivalent.

All composite wood materials, including hardwood plywood, particleboard, or medium density fiberboard, used in office, classroom, or healthcare furniture must be: Certified and labeled as compliant to the US EPA Toxics Substances Control Act (TSCA) Title VI label 40CFR 770. (Note: In general, the California Air Resources Board (CARB) accepts the TSCA label as meaning that products also comply with the CARB ATCM #93120 Phase 2
of California’s Code of Regulations, Title 17 §93120.2 – Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products. There are some slight differences between the TSCA and CARB regulations.) For products sold within California, if CARB’s requirements are more stringent for a particular product, then those products must meet the CARB requirements although the TSCA label is sufficient to indicate that the product is both TSCA and CARB compliant.

c. **Per and Poly-Fluoroalkyl Substances (PFASs) used as stain/water/oil resistant treatments**

All furniture supplied under this Price Agreement must be free of any long- and/or short-chain per- and poly-fluorinated alkyl compounds and fluorinated polymers used as stain, water, or oil resistant treatments at or above 100 ppm by weight of the homogenous material.

d. **Antimicrobials**

All furniture supplied under this Price Agreement must be free of any added or built-in chemical antimicrobials. Antimicrobials added to raw materials for the sole purpose of preserving the product are exempt, with the exception of triclosan and triclocarban which are explicitly prohibited.

e. **Polyvinyl Chloride (PVC)**

All furniture supplied under this Price Agreement must contain less than 1% (one percent) of polyvinyl chloride (PVC) by weight, excluding electrical components. Preference will be given to manufacturers that offer electrical components that are free of PVC.

**Requirements for Verification of Compliance**

Documentation of compliance at the product-level for all products included in the contract scope along with the submission of product pricing, and prior to contract award. Documentation shall be a formal declaration stating that the product supplied does not contain the targeted chemical above the stated threshold. The declaration must be written, signed, and dated by the manufacturer on the manufacturer’s letterhead. Additional verification may include:

- laboratory testing data from an accredited lab, verifying compliance; or
- complete information in the Health Product Declaration on product content related to these chemicals, verifying compliance.

If any party wishes to replace or add a product to the purchasing contract over the course of the contract term, the vendor must submit required documentation of compliance with these specifications.
Definitions

**Flame retardant chemical:** Any chemical or chemical compound for which a functional use is to resist or inhibit the spread of fire, including, but not limited to, halogenated, phosphorous-based, nitrogen-based, and nanoscale flame retardants; flame retardant chemicals listed as “designated chemicals” pursuant to California Health and Safety Code Section 105440; or 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.

**Component:** The separate constituent parts of furniture, including, but not limited to, cover fabrics, barrier materials, resilient filling materials, decking materials, and plastic parts.

**Upholstered seating:** As defined pursuant to California Business and Professions Code Section 19006, upholstered furniture (referred to herein as “upholstered seating”) includes products that “can be used as a support for the body of a human being, or his or her limbs and feet when sitting or resting in an upright or reclining position.” This does not include furniture used exclusively for the purpose of physical fitness and exercise, nor furniture meant for purposes other than to support the human body, such as tack walls.

**Halogenated flame retardant chemical (also known as organohalogen flame retardant chemical):** Any chemical or chemical compound containing chlorine or bromine bonded to carbon for which a functional use is to resist or inhibit the spread of fire. This includes any chemical or chemical compound containing chlorine or bromine bonded to carbon 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.

**Volatile Organic Compounds (VOCs):** Carbon compounds emitted as gases from certain solids and liquids. VOCs include a variety of chemicals, including formaldehyde.

**Formaldehyde:** A colorless, flammable gas at room temperature, used to produce resins for composite wood products (e.g., plywood, particle board, medium density fiberboard), as an intermediate in the synthesis of other chemicals, and in some fabrics.

**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 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 all 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.

**PVC:** Polyvinyl chloride (PVC), or vinyl, is a synthetic thermoplastic material made by polymerizing vinyl chloride. The properties of the material depend on the additives, including plasticizers.

Please contact procurement@ceh.org with any questions.

**Version 2 Update March 2022:**

**Section 2.a: Flame Retardant Chemicals**

Revisions reflect the adoption of TB 117-2013 as the national furniture flammability standard and updated labeling requirements.

**Section 2.b: Formaldehyde and Volatile Organic Compounds (VOCs)**

Revisions reflect EPA’s almost complete adoption of California’s CARB standard for formaldehyde emissions and the updated labeling requirements.

**Definitions: Upholstered Seating**

Revisions reflect a clarified definition of upholstered furniture.