



Kaiser Permanente's Health & Wellness Strategy: Avoiding Chemicals of Concern

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Environmentally Preferable Purchasing Program

EPP Policy



Avoid products containing:

- Persistent bioaccumulative toxic (PBT) compounds
- Bisphenol-A (BPA)
- Carcinogens, mutagens and reproductive toxic chemicals
- Halogenated flame retardants
- Chlorine-containing flame retardants
- Latex
- Mercury
- Phthalates (e.g. plasticizer DEHP (di-2-ethylhexyl phthalate))
- Polyvinyl chloride (PVC)
- Volatile organic compounds (VOCs) and semi-volatile organic compounds
- Antimicrobials
- Fluorinated Chemicals
- Prop 65

pursuing ideas & opportunities

- identify potential health impact
- research inside: Infection Prevention, Labor Management Partnership (LMP), KP Coalition Union, Work place Safety, Infectious Disease MD's, Safer Sub Chemicals Committee, Environmental Stewardship Council, National Environmental Health & Safety, Compliance, Permanente Medical Groups, National Facilities Services
- research outside: Healthcare organizations, Non Governmental Organizations, UC system, VA, DOD (looking for public or private endorsement)

industry resources, standards and certifications



The mark of responsible forestry



success stories

- 2004 - removed **PVC** and **Flyash** from the backing of our carpet
- 2007 - created the **Sustainable Fabric Alliance**
- 2010 - replaced **Vinyl lettering** with a digital printing process
- 2010 - elimination of **Triclosan** from clinical soaps and lotions
- 2014 - prohibition of **Flame Retardants**
- 2015 - prohibition of **Antimicrobials**
- 2015 – prohibition of **Fluorinated** chemicals

implementation and change management

- communicate via a Change Bulletin
- update the Standards Program & Design Criteria
- enlist supplier customer support through transition
- maintain a KP sustainability score card
- include “key performance indicators” in vendor contract



Environmentally Preferred Purchasing Score Card

Chemicals of Concern		Yes/No
Halogenated Flame Retardants	Ticking / Outer Fabric	Do not contain intentionally added halogenated organic flame retardants, OR Contain halogenated organic flame retardants at levels measured above 100 ppm
	Fire Barrier Fabric	Do not contain intentionally added halogenated organic flame retardants, OR Contain halogenated organic flame retardants at levels measured above 100 ppm, OR Do not contain fire barrier fabric(s)
	Care / Filling Material	Do not contain intentionally added halogenated organic flame retardants, OR Contain halogenated organic flame retardants at levels measured above 100 ppm
Halogenes	Ticking / Outer Fabric	Do not contain halogens above the combined threshold of 1500 ppm total, and were tested to be below 100 ppm combined, OR Contain halogens measured above 1500 ppm combined threshold and are at levels measured at _____ ppm combined
	Fire Barrier Fabric	Do not contain halogens above the combined threshold of 1500 ppm total, and were tested to be below 100 ppm combined, OR Contain halogens measured above 1500 ppm combined threshold and are at levels measured at _____ ppm combined, OR Do not contain fire barrier fabric(s)
	Care / Filling Material	Do not contain halogens above the combined threshold of 1500 ppm total, and were tested to be below 100 ppm combined, OR Contain halogens measured above 1500 ppm combined threshold and are at levels measured at _____ ppm combined
Polyvinyl Chloride	Ticking / Outer Fabric	YES or NO: All products supplied are free of PVC in the ticking
	Fire Barrier Fabric	YES or NO: All products supplied are free of PVC in the fire barrier
	Care / Filling Material	YES or NO: All products supplied are free of PVC in the care/filling material
Phthalates	Ticking / Outer Fabric	YES or NO: Total Phthalates observed in ticking are less than 0.1% (or 1000ppm) for DEHP, BBP, DHP, DIBP, DNOP, DHP and DCP
	Fire Barrier Fabric	YES or NO: Total Phthalates observed in fire barrier fabric are less than 0.1% (or 1000ppm) for DEHP, BBP, DHP, DIBP, DNOP, DHP and DCP
	Care / Filling Material	YES or NO: Total Phthalates observed in care/filling material are less than 0.1% (or 1000ppm) for DEHP, BBP, DHP, DIBP, DNOP, DHP and DCP
Heavy Metals	Ticking / Outer Fabric	YES or NO: Presence of mercury, lead, cadmium, antimony and each each measured at less than 100ppm and hexavalent chromium measured at less than 1000ppm in ticking
	Fire Barrier Fabric	YES or NO: Presence of mercury, lead, cadmium, antimony and each each measured at less than 100ppm and hexavalent chromium measured at less than 1000ppm in fire barrier fabric
	Care / Filling Material	YES or NO: Presence of mercury, lead, cadmium, antimony and each each measured at less than 100ppm and hexavalent chromium measured at less than 1000ppm in care/filling material
Perfluorinated Compounds	Ticking / Outer Fabric	YES or NO: All products supplied are free of intentionally added perfluorinated compounds (PFCA, HFCAs, PFCs and blends thereof including Perfluorooctanoic Acid (PFOA)) in the ticking
	Fire Barrier Fabric	YES or NO: All products supplied are free of intentionally added perfluorinated compounds (PFCA, HFCAs, PFCs and blends thereof including Perfluorooctanoic Acid (PFOA)) in the fire barrier fabric
	Care / Filling Material	YES or NO: All products supplied are free of intentionally added perfluorinated compounds (PFCA, HFCAs, PFCs and blends thereof including Perfluorooctanoic Acid (PFOA)) in the care/filling material
Chlorinated Bleaching Agents	Ticking / Outer Fabric	YES or NO: All products covered by the environmental specification that are comprised of bleached content will use only bleached content made using a Totally Chlorine Free bleaching process as indicated by a test result of less than 20mg/kg under ISO 11480
	Fire Barrier Fabric	YES or NO: All products supplied are free of SPA and SPA derivatives in the fire barrier fabric
	Care / Filling Material	YES or NO: All products supplied are free of SPA and SPA derivatives in the care/filling material
Antimicrobials	Dimethyl Ammonium Chloride (DMAC)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Dimethyl propyl sulfone	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Hexamethylenetetramine	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Sodium BBT (BTMET reduced)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Methylchloroformone (TZDMT)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Methylhexadecane (MT)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Tris(hydroxymethyl) (3-hydroxypropyl) (pre-er)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	acetaminophen	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Blue (dye)	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Blue sodium tetrahydroborate phosphate	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Blue dye 228/229	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Chlorox	YES or NO: This product is free of intentionally added antimicrobials as indicated below
	Blue Pyridone	YES or NO: This product is free of intentionally added antimicrobials as indicated below

sample bulletin: Prohibition of Antimicrobial Chemicals in Fabrics, Furniture and Finishes

“as part of an on-going mission to protect public health, Kaiser Permanente seeks to eliminate the specification of antimicrobial chemicals in the projects that we design and build”

BULLETIN KP FACILITIES DESIGN PROGRAM	
BULLETIN #: 2015-05	
Approved By: John Kouzelski, AIA, EDAC,	National Facilities Services, Vice President, Facilities Planning and Design
Topic: Prohibition of Antimicrobial Chemicals in Fabrics, Furniture and Finishes	
Date Issued: October 15, 2015	Contact: Jennifer MacDaniel

ITEM TYPE:
 New Modification Lesson Learned Infection Prevention Other:

BULLETIN TYPE:
 Recommended Required: see exceptions below

PROGRAM ELEMENT(S) IMPACTED: (Check all that apply)
 Space Program
 Functional Program
 Room Templates
 Design Criteria
 Sourcing Strategy
 MedAssets/KP Select
 Equipment/Furniture
 Signage
 Other—
 Not applicable

POTENTIAL IMPACT TO COST MODEL:
 Yes No Not Applicable
 Additional Comments:

POTENTIAL IMPACT TO PROJECT BUDGET:
 Yes No Not Applicable
 Additional Comments:

PROJECTS IMPACTED: (Check all that apply)
 All Projects, regardless of phase
 All Projects in Schematic Design Phase
 All Projects in Design Development Phase
 All Projects in Construction Documents Phase
 All Projects in Bidding Phase
 All Projects in Construction Phase
 All Projects not yet in Purchasing Phase
 Other—

BRIEF DESCRIPTION OF CHANGE:
 Effective immediately, specification of antimicrobial chemical additives or treatments for fabric, furniture, and finishes are prohibited on any Kaiser Permanente project. This prohibition includes all Main Loan Fund, PMBR and Expense projects.

What's Changing:
 As part of an on-going mission to protect public health, Kaiser Permanente seeks to eliminate the specification of antimicrobial chemicals in the projects that we design and build.

Our furniture and fabric vendor partners have been notified of our goal to eliminate the following 13 antimicrobial chemicals or elements:

1. Benzisothiazolin 3-one (BIT)
2. Didecyl dimethyl ammonium chloride (DDAC)
3. Didecylmethyl p-tolyl sulfone
4. Hexamethylenetetramine
5. Kathon 895 (GIT/MIT mixture)
6. Methylchlorobenzothiazolone (MCT, CMIT)
7. Methylisothiazolinone (MIT)
8. N-octadecyldimethyl (3-trimethylsilyloxy) propyl ammonium chloride
9. Silver (nano)
10. Silver sodium hydrogen zirconium phosphate
11. Silver zinc zeolites
12. Triclosan
13. Zinc Pyrithione

*Exception: Copper impregnated surfaces - specify these surfaces only if determined to be cost neutral by comparison to non-impregnated environmental surfaces such as door handles, over bed tables, bed rails, or other surfaces touched directly by patients.

Products and finishes that do not contain these additives or treatments are increasingly available.

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antimicrobials used in building materials

CASRN	Antimicrobials	Found In
2634-33-5	Benzisothiazolin 3-one (BIT)	adhesives, ceilings, composite wood components, engineered wood flooring, floor sealants and coatings, flooring finishes, high performance coatings, natural oil wood finishes, OSB, paints, resilient flooring, toilet seats, wall protection, wood flooring,
51200-87-4	4,4-dimethyloxazolidine	tile Installation products, admixes
20018-09-1	Diiodomethyl p-tolyl sulfone	adhesives, ceilings, composite wood components, engineered wood flooring, floor sealants and coatings, flooring finishes, high performance coatings, natural oil wood finishes, OSB, paints, resilient flooring, toilet seats, wall protection, wood flooring, grout, tile installation products
55965-84-9	Kathon 886 (CIT/MIT mixture)	adhesives, ceilings, composite wood components, engineered wood flooring, floor sealants and coatings, flooring finishes, high performance coatings, natural oil wood finishes, OSB, paints, resilient flooring, toilet seats, wall protection, wood flooring, grout, tile installation products, carpet - tile and sheet, acoustical ceilings components, carpet backing
26172-55-4	Methylchloroisothiazolinone (CIT, CMIT)	paint, high performance coatings, flooring, wood flooring
2682-20-4	Methylisothiazolinone (MIT)	ceilings, composite wood components, engineered wood flooring, floor sealants and coatings, flooring finishes, high performance coatings, OSB, paints, resilient flooring, toilet seats, wall protection, wood flooring, carpet - Tile and Sheet, acoustical ceilings components, carpet backing
27668-52-6	N-octadecyldimethyl (3-(trimethoxysilyl) propyl) ammonium chloride	ceilings, acoustical ceiling components
68424-84-0	Quaternary ammonium compounds, benzyl-C8-16-alkyldimethyl, chlorides	paint shield
265647-11-8	Silver sodium hydrogen zirconium phosphate	carpet backing
3380-34-5	Triclosan	ceilings, ceramic tile, composite wood components, engineered wood flooring, floor sealants and coatings, flooring finishes, high performance coatings, OSB, paints, resilient flooring, toilet seats, wall protection, wood flooring, grout, tile installation products, carpet - Tile and Sheet, acoustical ceilings components, carpet backing
13463-41-7	Zinc Pyrithione	adhesives, paints, flooring, acoustical ceilings, ceilings, carpet backing, wood flooring, high performance coatings, composite wood, carpet- tile and sheet, resilient flooring, wood flooring, carpet backing, engineered wood flooring, wall protection adhesive, OSB, textiles, toilet seats
	Silver (nano)	adhesives, textiles, ceramic tiles, hospital beds and furniture, paints, air conditioning, epoxy resin floor, PVC wall cladding, flooring, grout, hygienic laminated surfaces, wallpaper, carpet, hospital doors, toilet seats
130328-20-0	Silver zinc zeolites	resin, adhesives, grouts, ceramic tile, toilet seats
7173-51-5	Didecyl dimethyl ammonium chloride (DDAC)	wood flooring
100-97-0	Hexamethylenetetramine	adhesives and sealants, agricultural chemicals (non-pesticidal), CBI, finishing agents, paints

design criteria: establish facilities implementation standards



FACILITIES DESIGN PROGRAM DESIGN CRITERIA 4.9.15 V5



FACILITIES DESIGN PROGRAM DESIGN CRITERIA 4.9.15 V5



lessons learned

- transition takes time
- suppliers might not be fully ready to change
- educate and help others to understand, we are all not scientists
- support the field teams
- consider impact on projects in flight vs. new construction
- expect culture to fall off the wagon
- fail fast

thank you, for your time

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