

Kicking the Toxics out of Office Furniture

Center for Environmental Health

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Abstract

CEH engaged in a 2 ½ year effort to leverage the buying power of large purchasers from a wide variety of sectors to move the furniture industry towards offering safer products. Specifically, CEH was interested in reducing the use of specific harmful chemicals commonly found in furniture (nicknamed the “Hazardous Handful”): flame-retardants, fluorinated stain treatments, antimicrobials, formaldehyde and PVC. CEH developed a practical set of tools and resources that are needed by purchasers and provided technical assistance, at no cost, to purchasers who were interested in purchasing furniture without these chemicals.

Additionally, CEH worked within BIFMA to help develop a criterion for their new level standard that provides a clear and easy way to help purchasers identify and specify healthier products. Lastly, CEH provided assistance to states working on a multi-state cooperative buying agreement and helped insert environmental criteria into their RFI and RFP. As a result of CEH’s work, more than \$650 million in purchasing power has been driven to preferable products. This is a very conservative estimate as some private purchasers or States are reticent or unable to sign a Purchaser Pledge but are still driving their dollars towards safer products. If we were to include those spends, our total would likely be over \$1 billion in purchasing power.

<i>Goals</i>	<i>Strategies</i>	<i>Results</i>
Increase the availability of furniture without harmful chemicals by leveraging a wide range of purchasers’ buying power	Educate purchasers on the issue, provide them with the tools they need to implement healthier furniture purchasing practices and provide technical assistance as needed.	Held 70 webinars and educated over 1,650 purchasers. Provided technical assistance to hundreds of purchasers. More than \$650 million in purchasing power has been directed to healthier furniture purchasing.

<i>Goals</i>	<i>Strategies</i>	<i>Results</i>
Increase requirements for healthier furniture in multi-state cooperative buying agreements, government contracts and private organizations	Draft technical specifications that can be used by any purchaser to specify furniture without the harmful chemicals. Work with organizations on integrating these criteria into their RFPs and contracts. Work on inserting environmental criteria into 1 major multi-state buying agreement.	Technical specifications have been delivered to hundreds of purchasers. Numerous organizations including state and local government agencies, higher education, healthcare, and private businesses have incorporated these specifications into their RFIs, RFPs and contracts. Environmental criteria were included in a multi-state buying group's RFI and RFP.
Develop a criterion within the BIFMA level certification to reward companies who remove the "hazardous handful"	Work with Health Care Without Harm, furniture manufacturers, and BIFMA leadership to develop a criterion that purchasers can look to and know that products that meet that criterion are free of the identified harmful chemicals.	As of this writing, the criterion has been developed, vetted and passed through its committee. A final vote is expected to occur in the first half of 2017.. It is expected to pass and purchasers can specify it in the future.

Goals

Furniture is an unexpected reservoir of many hazardous and often unnecessary chemicals, including toxic flame retardants, formaldehyde, highly fluorinated chemicals, antimicrobials and toxic materials like polyvinyl chloride (vinyl). We refer to this group as the "Hazardous Handful." While regulations changed in 2014 to allow for furniture to be made without unnecessary flame retardant chemicals, we wanted to encourage and expedite the transition to products without these harmful chemicals as quickly as possible. Other chemicals such as fluorinated stain treatments and antimicrobials were being requested by purchasers without any awareness of their environmental or health effects. The furniture industry was receptive to these changes but needed customers to request products without these chemicals so that they knew that if they made products without the hazardous handful, there would be a market for them. Overall, we wanted to create a demand for healthier furniture to improve human and environmental health.

Strategies (Activities)

- Educated a wide range of purchasers including government, higher education, private corporations and child care organizations on the health, environmental, and cost savings benefits of purchasing furniture without the "Hazardous Handful." We did this through webinars, individual calls with purchasers and presentations at conferences. We often co-presented with designers and purchasers who had undertaken this work.
- Developed a "Purchaser Pledge to Prefer Healthier Products" and had large purchasers sign it. We shared the signed pledge with furniture manufacturers and the media.
- Worked with Health Care Without Harm to develop technical specifications that purchasers could use to specify furniture without the "hazardous handful". Distributed those technical specifications widely.

- Provided technical assistance to any purchaser who requested it. Technical assistance varied from helping an organization adapt the technical specifications for their use; survey their manufacturers; interpret results from questionnaires sent; research fire codes in their area; evaluate whether their current furniture offerings included products free of the “hazardous handful”; and any other needed task. In the case of the State of Massachusetts, CEH helped them survey their furniture vendors and created an extensive database of those products that were free of the “hazardous handful” so that purchasers could identify healthier products. In the case of the City and County of San Francisco, we worked closely with them to develop their technical specifications, identify the availability of these types of products in the market place (using the State of Massachusetts data base and other available resources) and provided other assistance as needed.
- Created an online e-guide for purchasers that explained the rationale for purchasing furniture without harmful chemicals, provided all the resources we had developed, and provided a listing of companies that offered healthier products.
- Worked to create a criterion within the BIFMA level certification that requires that products comply with restrictions on the “hazardous handful”.
- Worked with states representatives who are on the committee for a multi-state buying agreement to insert requirements for products to be free of harmful flame retardant chemicals, incentivize the removal of other harmful chemicals, and other sustainability efforts.

Results

Goals Achieved

- CEH provided 70 webinars and educated over 1,650 purchasers.
- 20 purchasers with a purchasing power of more than \$650 million signed CEH’s Purchaser Pledge to Prefer Flame Retardant-Free Furniture. Signers included Facebook, Genentech, Harvard University, City of Portland, City and County of San Francisco, Yahoo!, Autodesk, Hackensack University Medical Center, HDR Architecture, Perkins + Will, Blue Cross Blue Shield of Massachusetts, Kaiser Permanente, Dignity Health, and more. This year 13 purchasers have already signed CEH’s expanded Purchaser Pledge to Prefer Furniture without the “Hazardous Handful.” Signers include local government, universities, healthcare organizations technology companies and private businesses.
- Technical specifications are now available that detail the requirements for furniture without the “Hazardous Handful.” These technical specifications have been shared with hundreds of purchasers.
- Provided technical assistance to hundreds of purchasers. CEH provided assistance on furniture specifications for the State of New York, City of Portland, and the City and County of San Francisco. The City and County of San Francisco anticipate using their specifications for all purchasing done by the City and County. CEH also held a series of calls with a group of seven states to discuss how they can move towards healthier furniture. Each of these states has identified at least one activity they plan to undertake to implement healthier furniture practices.
- Worked intensively with the State of Massachusetts to survey their vendors, develop an extensive data base assessing their product offerings against 13 environmental attributes, rate the products as either EPP or EPP Plus, and develop accompanying documents to explain the need and criteria for EPP products. Over 900 products were rated and more than 350 products were identified as EPP or EPP Plus.

- On-line purchaser guide has been developed and so that any purchaser can access it.
- Drafted a criterion for the BIFMA level standard that rewards companies that comply with the restrictions on the “Hazardous Handful.” The criterion has passed through the workgroup committee but still needs to be voted on by the full committee.
- Drafted new environmental requirements to be included in a multi-state purchasing contract.

CEH took the initiative to research the environmental and human health effects of chemicals commonly used in furniture and studied the economic case for this work to ensure it was cost savings or cost-neutral. We developed an action plan and have already committed 2 1/2 years to educating and assisting institutional and private purchasers in implementing healthier purchasing practices. CEH also stepped up to serve on national efforts including a multi-state cooperative buying agreement, the revision of the BIFMA level standard, and the EPA’s workgroup on furniture. CEH developed tools that were not previously available and made them available to more than 1,650 purchasers. We made all of this information publicly available to encourage other purchasers to engage in this work.

Goals Not Achieved

As mentioned above, the BIFMA criterion to restrict the use of the identified chemicals of concern has been drafted but the revised standard has not yet received the final vote from the full committee. This is expected within the first six months of 2017. Once approved, CEH will promote adoption of this criterion by purchasers.

It is not yet known which environmental criteria will be made mandatory in the multi-state cooperative buying agreement and which will just be optional. CEH will develop a “Participating Addendum” in the coming months for agencies that wish to go beyond the mandatory requirements specified in the Master Agreement.

LESSONS LEARNED

Providing Necessary Tools and Resources

Once purchasers have decided that they would like to engage on a sustainability effort, the necessary tools and resources should be provided to purchasers. Purchasers don’t have the time to become experts in each product category and need the resources and tools they need to implement the process.

Providing Technical Assistance

Hands-on assistance is necessary to help busy purchasers achieve implementation of the sustainability project. Technical assistance must be available to meet the specific needs of purchasers.

Publicly Available Database of Environmentally Preferable Products

Purchasers want to know what they can buy to make safer choices. Having a list of safer choices readily available, makes it much easier and more expedient for purchasers to choose safer products without having to re-survey companies.

Large Offering of Preferable Products

It was great to learn that there a large number of preferable products available. Many of the toxic chemicals are used in the fabrics so proper fabric choice can reduce the use of these toxic chemicals.

NGO-Public Partnership Works

CEH worked to become steeped in the furniture industry and related chemicals. As a result CEH was able to offer helpful assistance to busy purchasers who would otherwise not have had the expertise or time to research this topic. In return, CEH helped to fulfill its own mission of protecting the public from exposure to toxic chemicals by driving the purchasing power of large organizations to healthier furniture.

Benefits

Internal Benefits

- CEH developed strong relationships with a number of private and public purchasers who are now interested in working on other sustainability issues. As CEH gathers together like-minded purchasers, we can use this cohort to move the market towards safer products in other product categories in the future.
- CEH further developed its reputation as a helpful resource to purchasers

External Benefits

- More than \$650 million of purchasing power has been directed to healthier products. The amounts of the “hazardous handful” chemicals used in furniture will decrease.
- Organizations who implement the restrictions on the chemicals of concern will have healthier indoor air quality and will contribute to employee and visitor health and a healthier environment.
- An online purchaser e-guide is available to any purchaser who wishes it.
- A publicly available spreadsheet of preferable furniture is now on-line with accompanying documents to guide any purchaser towards healthier products.
- Once the BIFMA criterion that identifies products that comply with the “Hazardous Handful” is passed, purchasers will easily be able to specify healthier products.
- Reducing the use of these toxic chemicals is actually a cost savings measure and some purchasers may reduce costs by 10-50%.

Business Case

Purchasers who in the past had to buy furniture containing flame retardants due to outdated flammability standards and no longer have to do so, can save on average approximately 30 percent. University of Hackensack Medical Center reported a savings of \$65,000 on a \$250,000 purchase of lounge furniture that did not contain flame retardant chemicals. Oftentimes fluorinated stain treatments and added antimicrobials are added costs, so their avoidance can also save important dollars.



Partner with an NGO who has expertise in a product category of interest and together you will be more effective.

CEH developed expertise in the furniture industry to assist busy purchasers to implement safer furniture purchasing practices. The purchaser benefited from the expertise and already developed resources we were able to bring to the project and CEH benefitted by furthering our mission to reduce the public to exposure to toxic chemicals.

Snapshot of database developed for the State of MA

EPP Furniture on OFF38: Office, School and Library Furniture, Accessories & Installation Statewide Contract

The information in the table was submitted by the vendors/manufacturers and it has not been verified by the Commonwealth of Massachusetts. OSD will update the information periodically, but it is important that buyers verify the information with vendors prior to purchase. This table is meant solely as a guide to help buyers identify environmentally preferable options. Vendors that would like to change any information should send a request to Julia Wolfe, Director of Environmental Purchasing at julia.wolfe@state.ma.us.

For a summary of this table and additional guidance, visit the OSD EPP Furniture webpage at: www.mass.gov/epp

This table was compiled as of 7/1/2016

Use the filter buttons in the lower right corners of the header row cells to sort options.

Key	
(Please refer to the "Answer Key Tab" below for additional information)	
All	
Some	
No/None	
Unknown	
Does Not Apply	

OFF38 Yeard	Manufacturer	Product Line	Product Type	EPP or EPP Plus	Meets EPP if each column is checked "All" or "Some" in attributes listed below					Considered EPP Plus if product line meets the EPP attributes in columns F-K, and has "All" or "Some" in at least one of the attributes listed below					Additional Attributes For Consideration				
					Reduced VOC Emissions (meets CA Section 01350)	Meets CA DCR, Title II (for formaldehyde)	Flame Retardant-Free (NOTE: excludes TB 133)	Free of Added Antimicrobials (NOTE: added for the sole purpose of preserving the product - see example)	PVC-Free (NOTE: products made of less than 1% PVC by weight are exempt)	Free of per- and poly-fluorinated chemicals used as stain or water repellent treatments	GreenGuard Gold Certified	SCS Indoor Advantage Gold Certified	Cradle to Cradle Certified	BIFMA Level (NOTE: Level 2 or 3)	Health Product Declaration Available	Complies with Massachusetts Statewide EPP Furniture Specifications and Antimicrobial Laminates (see www.mass.gov/epp)	Forest Stewardship Council Certified	Labeled for Flame Retardant (per Section 19034 to the Business and Professions Code)	
	Decorative Office Partition	Herman Miller	Acron	Seating	EPP Plus	All	All	All	All	Some	Unknown	Unknown	All	Level 3	No/None	All	No/None	All	
	Proboddy Office	Herman Miller	Quicketend, Flost	Accessories	EPP Plus	All	All	All	All	All	No/None	All	No/None	Level 1	No/None	No/None	All	Does not apply	
	Proboddy Office	Kimball Office Inc.	Poss	Seating	EPP Plus	All	All	All	All	All	All	Unknown	Level 3	No/None	All	All	All	All	
	WB Mazon	Allited	Gather Linger Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Gather Mind-Share Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Gather Rise Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Gather Scoop Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Inspire Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Parallel Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Parade Seating	Seating	EPP Plus	All	All	Some	Some	All	Some	No/None	All	No/None	Level 2	No/None	Some	Some	All
	WB Mazon	Allited	Endless Desktop	Seating	EPP Plus	All	All	Some	All	All	All	No/None	All	No/None	Level 2	No/None	Some	Some	Does not apply
	WorkSpace Resources	Arcoflo	All concept meet office furniture	Class Goods	EPP Plus	All	All	All	All	All	All	No/None	Unknown	No/None	No/None	No/None	No/None	No/None	Does not apply
	WB Mazon	antirebell	Alphabet Seating	Seating	EPP Plus	All	All	Some	All	All	All	No/None	All	No/None	No/None	No/None	No/None	No/None	No/None

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