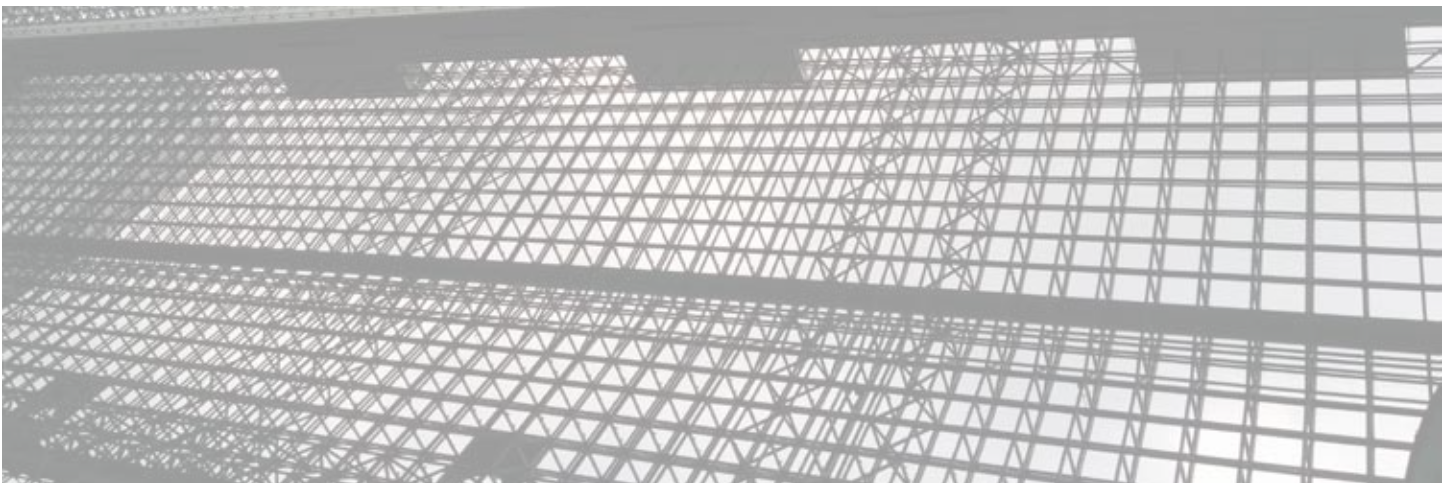




Healthier Buildings

A public procurement guide to safer products for new construction and existing buildings

Version 1: October 2015



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Founded in 1968, Oregon Environmental Council (OEC) is a statewide nonprofit dedicated to advancing innovative, collaborative solutions to Oregon's environmental challenges for today and future generations.

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About this guide

What does “healthier buildings” mean?

When we say healthier buildings, we’re talking about using materials and products to construct, rehabilitate, remodel, or maintain buildings that contain safer alternatives to toxic chemicals. While there are other factors, like ventilation, natural light, and other design features that contribute to occupant health, this guide is focused on how to ensure that your projects use safer products. Safer products don’t contain toxic chemicals, or contain fewer toxic chemicals that are inherently less hazardous.

Considering human health and well-being in building projects is responsible and innovative

Public procurement and project management professionals are dedicated practitioners who hold important decision-making power. Leading public sector organizations, in collaboration with contractors and their supply chains, are using information about chemical ingredients and safer alternatives in innovative ways to inform the design, engineering, construction, and operation and maintenance of buildings.

A guide to empower procurement professionals

Together, state and local governments across the U.S. spend about \$1.5 trillion annually on goods, supplies, equipment, services, and construction.¹ That means that your organization has the power to protect the public, employees, and the environment while creating a positive influence in the marketplace. Even if your budget or scope is relatively small, when you embed healthy building elements into standards, solicitations, and contracts, you’re part of a larger movement of organizations and governments across the country and around the world. Together, we’re able to drive demand for safer, healthier building products.

Every building can use safer, healthier building products

Even if your project isn’t pursuing a green or sustainable building certification, it can still be a healthy building. Healthy buildings help minimize organizational risk, and represent a responsible use of public funds. Hiring building professionals like architects, engineers, and contractors that help provide reasonable due diligence to protect human health makes sense for any project.

A note about costs

Many people still consider “green” building features or safer building products to carry an extra cost for projects. While a cost comparison specific to safer building products was beyond the scope of this guide and does not appear to currently exist for reference, experience by a wide variety of public and private sector organizations reveals that many safer products that do not contain toxic chemicals are cost competitive with traditional versions. For more information about costs, see the Relevant Resources section on page 18 of this guide.

The science supports action

Chronic diseases are among the most common, costly, and preventable of all health problems in the U.S.

- Seven out of 10 deaths among Americans each year are from chronic diseases
- Heart disease, cancer and stroke account for more than 50% of all deaths each year²
- One in 11 American kids have asthma³

Strong scientific evidence links toxic chemicals to some chronic diseases

There are multiple factors that can cause chronic diseases in people, including genetics and lifestyle choices like nutrition and physical activity. Environmental factors, including exposure to toxic chemicals also play a role in chronic diseases in people, including children.³ For example, over 200 chemicals are known, or reasonable anticipated to be human carcinogens, including diesel particulate matter, formaldehyde, vinyl chloride, and styrene.⁵

Toxic chemicals linked to chronic diseases and other health impacts are commonly found in building materials and products

Chemicals scientifically linked to chronic diseases like cancer, asthma, and obesity are used in a wide variety of materials and products used to construct and maintain our workplaces, homes, schools, and other buildings. Flooring, furniture, paints, and sealants are some of the materials that frequently contain chemicals of concern for human health and the environment.

Hazardous chemicals commonly found in building materials and products are also found in our bodies

National health surveys conducted by the Centers for Disease Control and Prevention have found more than 148 synthetic chemicals present in the blood and urine of most Americans.⁶

Chronic diseases that result from environmental exposures to these hazardous chemicals are preventable

We spend up to 90% of our time indoors.⁷ This makes healthier indoor environments and good indoor air quality critical in preventing unnecessary exposures to hazardous chemicals.

Prevention of these diseases can result in significant cost savings and improve our quality of life

Chronic diseases like cancer, asthma, and diabetes impact our physical, mental, and emotional well being over long periods of time. Managing chronic diseases is costly for individuals and families, as well as our society. Medical expenses and the associated losses in productivity that result from missing work from chronic diseases cost an estimated \$13 billion in Oregon in 2010.⁸

Common chemicals in building products

We consider materials and products used in and around our buildings to be an important design consideration because they frequently contain hazardous chemicals. Since we work, play, learn, and live so much of our lives indoors, the potential for continuous and prolonged exposure to hazardous chemicals is significant. The following is some basic information about where hazardous chemicals are found in some building products, how we're exposed, and how our health can be impacted. In many cases, safer alternatives to these hazardous chemicals exist or are being developed and tested.

Flame Retardants (Halogenated and Organophosphate)



Halogenated flame retardants (HFRs) are a class of chemicals that use halogens including bromine and chlorine. Organophosphate flame retardants are a class of chemicals that use phosphorous.

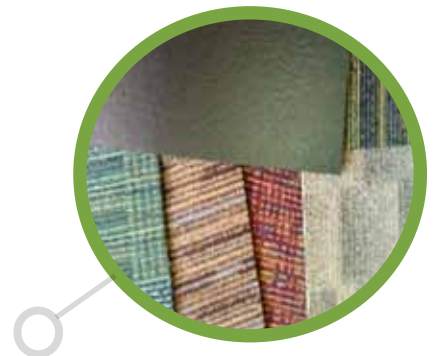
Products that commonly contain flame retardants include foam building insulation, polyurethane foam, wire and cable, and electronics. We're commonly exposed to flame retardants through dust in our buildings.^{9,10}

These chemicals have been shown to disrupt thyroid and estrogen hormones, which are linked to reproductive and developmental health effects including reduced sperm count in males, changes in ovarian cell structure in females, and abnormal brain development in children.^{11,12} Many HFRs are also persistent in the environment and bioaccumulative, building up in children's bodies through breast milk and dust inhalation.^{14,15,16} Organophosphate flame retardants are also linked to impacts on fish and other aquatic organisms.¹⁷

Perfluorochemicals (PFCs)

PFCs are commonly found in stain and non-stick treatments, including Scotchguard®, Teflon®, and Stainmaster® on furniture, carpet, and other office products with fabric.¹⁷ Common PFCs include perfluorooctanoic acid (PFOA) and perfluoroactane sulfonate (PFOS).

These chemicals do not break down in the environment and are found in indoor dust as well as human breast milk, where they are passed on to infants.^{18,19} PFCs can cause reproductive and developmental health effects in children including impaired behavior, learning, and memory as they become adults.²⁰



Chlorinated Compounds

The manufacture and disposal (combustion) of chlorinated compounds like polyvinyl chloride (PVC) produces a variety of chemicals including dioxins, vinyl chloride, polychlorinated biphenyls (PCBs) and more.²¹ Vinyl chloride is a potent carcinogen, known to affect the liver, brain, and lungs at low concentrations.²² Dioxins are some of the most toxic chemicals known and are created when chlorinated plastics burn. They do not break down in the environment, accumulating in our bodies where they can cause cancer.²³

Chlorinated compounds including PVC, chlorinated polyethylene, and polychloroprene are ubiquitous plastics, found in pipes, door and window frames, resilient flooring, carpet backing, furniture, membranes, and many other products. These plastics are frequently made with other toxic chemicals like phthalates and metals.²⁴



Volatile Organic Compounds (VOCs)



VOCs are a class of chemicals including formaldehyde, toluene, xylenes, and methylene chloride that are commonly found in building products.²⁵ VOCs are emitted as gases from solids and liquids and may concentrate in indoor air, where levels can be much higher (up to 10 times) than outdoors.²⁶

They are commonly found in paints, adhesives, cleaning supplies, composite wood products, and furniture. Concentrations of VOCs in new buildings have been shown to be higher than in established buildings, often at levels linked to increased cancer risk in humans.²⁷ VOCs can also cause headaches and damage the liver, kidneys, and central nervous system.²⁹

Phthalates

Phthalates are a class of chemicals that are used in a wide variety of products as a plastic additive.³⁴ Phthalates, and specifically Di(2-ethylhexyl) phthalate (DEHP) is used in PVC building materials.

Phthalates are a concern given their potential reproductive and developmental health effects on children, particularly to children exposed in the womb.^{35, 36} Exposure to phthalates, and specifically DEHP has been linked to cancer, skeletal malformations, developmental delays, and adverse effects on the male and female reproductive tract.^{37, 38}



Heavy Metals

Metals commonly found in building materials include lead, cadmium, and mercury. Mercury is found in synthetic gypsum board (also known as drywall or wallboard) and can leach into water from unlined landfills, where it comprises about 15% of construction and demolition debris.³⁹ ⁴⁰ Mercury is particularly toxic to children, where exposure results in a loss of intelligence and impaired learning, attention and memory.^{41, 42} In adults, low levels of mercury exposure over time are linked to diseases similar in nature to Alzheimer's.⁴³

Sample language

The following section includes sample language for a variety of building construction, renovation, and operations & maintenance-related documents including procurements, contracts, and design standards.

The sample language included in this section can be added to documents verbatim, or modified to suit the need of individual organizations and projects.

For some sample language sections, like for the Standard Professional Services Contract, sample language can be added to sections or subsections of existing documents that bear the same or similar title as denoted by “**(or similar section)**”. It’s up to the document developer to determine which section or subsection most closely align with the sample language provided.

In some cases, like the sample language provided for Invitations to Bid, you will need to customize it by filling in **[bracketed]** sections.

Sample Language - Standard Professional Services Contract

Standard Professional Services Contracts are commonly used by organizations when hiring architectural, engineering, and other building construction and renovation-related service providers. The following sample language is designed to be added to existing sections and subsections.

PROJECT PHILOSOPHY (or similar section)

In pursuing these goals, Consultant, with Owner's assistance, shall:

Reduce the number of toxic chemicals used in specified products on the Project, like those identified in the State of California's Proposition 65 List, the Living Building Challenge Red List, and other relevant lists of chemicals of high concern.

BASIC SERVICES - SCHEMATIC DESIGN SERVICES (or similar section)

MATERIALS RESEARCH/SPECIFICATIONS Services (or similar subsection).

(Note: Add to existing section language) Consultant shall include: less toxic materials specifications or materials lists reviewed by third-party certification programs; safer products which are already commercially available to the greatest extent possible; safer options that also limit premium costs and overall lifecycle costs.

BASIC SERVICES - DESIGN DEVELOPMENT SERVICES (or similar section)

MATERIALS RESEARCH/SPECIFICATIONS Services (or similar subsection)

(Note: Add to existing section language) Consultant shall conduct research on safer materials and products that protect human health and the environment by avoiding chemicals of concern, including carcinogens, asthmagens, mutagens, neurotoxicants, reproductive toxicants, endocrine disruptors, and chemicals that are persistent, and/or bioaccumulative.

Sample Language - Technical Design Standards

Technical Design Standards documents help clearly and concisely communicate your standards, including preferences and recommendations, to the team of Consultants and Contractors who work on renovation and construction projects. Compliance with these standards are often a contractual requirement for contractors.

GENERAL REQUIREMENTS (or similar section) SUSTAINABLE DESIGN (or similar subsection)

BASIC SERVICES - SCHEMATIC DESIGN SERVICES (or similar section) MATERIALS RESEARCH/SPECIFICATIONS Services (or similar subsection).

Consultant shall include: less toxic materials specifications or materials lists reviewed by third-party certification programs; safer products which are already commercially available to the extent that is practical; safer options that also limit premium costs and overall lifecycle costs.

BASIC SERVICES - DESIGN DEVELOPMENT SERVICES (or similar section) MATERIALS RESEARCH/SPECIFICATIONS Services (or similar subsection)

(Note: Add to existing section language) Consultant shall include research for safer materials and products that protect human health and the environment by avoiding chemicals of concern, including carcinogens, asthmagens, neurotoxicants, reproductive and developmental toxicants, and endocrine disrupting chemicals, among other type of hazards.

Sample Language: Invitations to Bid

The sample language included in this section is intended for use in Invitations to Bid (ITBs) for building construction and renovation or public improvement projects.

This sample language is designed to compliment traditional ITB language, including projects pursuing Leadership in Energy & Environmental Design (LEED) certifications. It strengthens traditional ITB language including LEED requirements by emphasizing the importance of protecting human health through the use of safer, less-toxic building products.

This language can be used verbatim or modified for incorporation into ITB template documents including the pursuant contract documents, or used for individual projects.

This sample language should be customized for your organization by changing the **[bracketed]** language. Bracketed “Note” language is included as a reference for ITB developer and can be removed if desired.

Simply cut and paste this language into the relevant sections of any existing ITB documents to improve the value and sustainability of the project while reducing risk and liability.

Sample Language - Building Construction or Renovation ITBs

Section [X] – Drawings and Specifications (or similar section)

[X.X] Product and Material Health & Safety Standards

[X.X.X] Standards Overview & Purpose

[Organization] is committed to protecting the health of building occupants, employees, children, and the environment by using safer, less toxic products and materials on this project. To the greatest extent possible, [Organization] prefers to use safer products and materials that do not contain chemicals of concern as defined in item **[X.X.X. Priority Product Classes]** below. Prospective bidders can support this commitment by ensuring that the standards set forth in this section are adhered to during project planning and delivery.

[X.X.X] Priority Product Classes

[Organization] is focused on product categories that represent the highest potential for human and environmental exposure to toxic chemicals during building construction and use. These categories of products and materials include, but are not limited to, the following with accompanying Construction Specifications Institute MasterFormat divisions for reference:

Div 03 Concrete, Div 04 Masonry, Div 05 Metals, Div 06 Wood, Plastics, Composites, Div 07 Thermal and Moisture Protection, Div 08 Openings, Div 09 Finishes, Div 10 Specialties, Div 11 Equipment, Div 12 Furnishings, Div 32 Exterior Improvements, Div 33 Utilities

[Note: Additional information about toxic chemicals typically found in products within these divisions is available here: <http://transparency.perkinswill.com/Home/PrecautionaryList>]

[X.X.X] Priority Chemicals of Concern

[Organization] wants to limit risk by reducing exposure to products and materials that contain priority chemicals of concern scientifically linked to toxicity in humans or ecosystems. On this project, to the greatest extent possible, Contractor will avoid the use of products that contain chemical ingredients like those found on the Living Building Challenge Red List and the following classes of chemicals: Volatile organic compounds, phthalates, heavy metals, perfluorinated chemicals, chlorinated chemicals, and halogenated flame retardants.

[X.X.X] Authority

[Organization] pursues safer, healthier building products and materials under the authority of **[Organization's risk management, environmentally preferable procurement, green building, sustainability, or other relevant policies]**.

Sample Language: Requests for Proposals

The sample language included in this section is intended for use in Requests for Proposals (RFPs) for building-related services on new construction and renovation projects.

It is designed to compliment traditional proposal language including references to Leadership in Energy & Environmental Design (LEED) certifications. It strengthens traditional proposal language including LEED requirements by emphasizing the importance of protecting human health through the use of safer, less-hazardous building products.

This language can be used verbatim or modified for combined services including Architectural and Engineering (A&E) services and Construction Manager/General Contractor (CM/GC) services. This language can also be modified for Architectural, Engineering, Construction Manager, and General Contractor services provided individually.

Simply cut and paste this language into the relevant sections of an existing RFP to improve the value and sustainability of the services provided on the project. This sample language should be customized for your organization by changing the **[bracketed]** language.

Sample Language - Architectural & Engineering Services RFPs

Relevant RFP Sections:

Introduction, Project Overview, Purpose, Scope of Work/Scope of Services, Proposal Requirements

Introduction/Project Overview/Purpose

Maintaining healthy workplaces and public spaces is a priority for [Organization]. Architects and Engineers have an important role to play in protecting human health and the environment on this project by identifying and specifying safer building products.

Scope of Work/Scope of Services (“LEED”, “Living Building Challenge”, “Green Building”, “Sustainable Design”, or similar subsection)

[Organization] prioritizes the use of building materials and products that are safer for people and the environment. In pursuit of Leadership in Energy and Environmental Design (LEED) v4 certification, this project is required to achieve points for the Materials & Resources credit with specific emphasis on MRc4 “Building Product Disclosure and Optimization – Material Ingredients”. Additionally, products used in this building should avoid chemicals ingredients found on the Living Building Challenge’s Red List.

Proposal Requirements (“Experience with Sustainable Design”, “Experience with Green Building Design”, “Experience with LEED Projects”, or similar subsections)

Describe your team’s experience designing safer buildings using products including those that do not contain chemical ingredients identified on the Living Building Challenge’s “Materials Petal” Red List or other relevant lists of chemicals of concern like the U.S. EPA’s Chemicals of Concern list. Describe the process by which your team identifies and specifies safer, less hazardous building products.

Sample Language - Construction Manager/General Contractor Services RFPs

Relevant RFP Sections:

Introduction, Scope of Work, Scope of Services, Proposal Requirements

Introduction (Project Overview, Purpose, or similar section)

Maintaining healthy workplaces and public spaces is a priority for [Organization]. Contractors and subcontractors have an important role to play in protecting human health and the environment on this project by using safer building products.

Project Goals and Development Principles (or similar section – Design/Build Option)

The goals and development principles below reflect [Organization’s] values and commitment to sustainability in both the building and development process.

Goal: Achieve Leadership in Energy and Environmental Design (LEED) version 4 Platinum certification or better, with an emphasis on points in the “Indoor Environmental Quality” and “Materials & Resources” categories.

Principle: Construction and Operational Sustainability – Use durable, safer building materials and products with transparent ingredient lists and the fewest possible hazardous chemicals that will deliver low long-term operational costs and an easy-to-maintain, functional, healthy, and efficient facility.

Scope of Work/Scope of Services (“LEED”, “Living Building Challenge”, “Green Building”, “Sustainable Design”, or similar subsection)

[Organization] prioritizes the use of building materials and products that are safer for people and the environment. In pursuit of Leadership in Energy and Environmental Design (LEED) v4 certification, this project is required to achieve points for the Materials & Resources credit with specific emphasis on MRc4 “Building Product Disclosure and Optimization – Material Ingredients”. Additionally, products used in this building should avoid chemicals ingredients found on the Living Building Challenge’s Red List.

Proposal Requirements (“Experience with Sustainable Construction Practices”, “Experience with Green Buildings”, “Experience with LEED Projects”, or similar subsections)

Describe your team’s experience building with safer building products including those that do not contain chemical ingredients identified on the Living Building Challenge’s “Materials Petal” Red List or other relevant lists of chemicals of concern like the U.S. EPA’s Chemicals of Concern list. Describe the process by which your team, including your subcontractors, identifies and purchases safer, less hazardous building products.

Sample Language - Janitorial Services

The following sample language can be used in solicitations for janitorial services. It should be customized for your organization by changing the **[bracketed]** language.

The [Organization] places a high priority on the health of employees and our environment. That means [Organization] prefers hiring service providers that use products and methods of cleaning and sanitation that are safer for human health and protect ecosystems. Proposers shall provide at least two examples of how they identify and select products and methods that avoid hazardous chemicals for your customers.

Examples could include, but are not limited to, the use of only third-party certified products, using EPA's Design for the Environment (DfE) cleaning products, requiring vendors to identify safer products using fully disclosed Healthy Product Declarations (HPDs), or meeting the requirements of Leadership in Energy & Environmental Design (LEED) v4 Green Cleaning – products and materials credit (EQc7).

Sample Language - Clean Diesel Construction

The following sample language can be used in RFPs for construction services where diesel equipment (generators, equipment, vehicles, etc.) will be used. It should be customized for your organization by changing the **[bracketed]** language.

[Organization] places a high priority on the health of employees and our environment. Increasing studies link diesel particulate matter to serious public health impacts from aggravating asthma to heart and lung problems to cancer and premature mortality. Diesel exhaust also has environmental significance as a global warming contributor. As such, [Organization] is interested in working with contractors that are taking steps to reduce their diesel emissions through “clean diesel” engines. “Clean diesel compliant” includes the following:

- A. Any diesel powered vehicle with an USEPA certified model year 2007 or newer engine, or
- B. Non-road diesel equipment certified as USEPA Tier 4, or
- C. Any diesel powered vehicle or non-road diesel equipment that has been retrofitted with a diesel particulate filter verified by USEPA or the California Air Resources Board, or
- D. Any medium-duty or heavy-duty vehicle or non-road equipment powered by alternative fuels like propane, natural gas, electricity, or biodiesel blends greater than 50%.

Proposers shall address the following in their response:

1. Please identify the quantity (total number and percent of your vehicle fleet and non-road equipment) that is clean diesel compliant.
2. Does your firm require the rental of diesel vehicles or non-road diesel equipment that is clean diesel compliant? If yes, please describe how this preference is implemented.
3. Does your firm require subcontractors to utilize diesel vehicles and non-road equipment that is clean diesel compliant? If yes, please describe how this preference is implemented.
4. Does your firm have an idle reduction policy for its construction projects? If so, please provide a copy of the policy and describe how it is implemented.
5. If your firm does not currently have these requirements, will you comply with them in the performance of these contracts? Which ones?

Product vendor outreach

Promoting information exchange with your vendor and contractor pool will support informed decision-making and amplify the impact of your healthy building efforts. It can provide vendors and contractors with the opportunity and motivation to engage their suppliers and manufacturers, and allow them to differentiate themselves through value-added services like product screening.

Clearly communicating about the importance of human health will lead to the creation of safer chemistries and innovative products now and in the future, opening the door to better value, more competition, and lower costs.

To further foster information exchange and open communication with vendors and contractors, use the sample vendor letters on the following pages. It should be customized for your organization by changing the **[bracketed]** language.

Vendor Letter - Flame Retardants in Furniture

The following sample letter is drafted for communicating about toxic flame retardants in furniture. It should be modified for your organization by changing the **[bracketed]** language.

[Date]
[Company]
[Attention]
[Address]

Re: Safer alternatives to chemical flame retardants in furniture

To Whom It May Concern:

As you may know, in January 2014 a new furniture flammability standard was adopted by the California Bureau of Home Furnishings and Thermal Insulation. We welcome the updated standard, Technical Bulletin 117-2013 (TB 117-2013), which will improve fire safety without requiring the use of flame retardant chemicals.

[Organization] is interested in purchasing products that do not contain flame retardant chemicals (including classes of organohalogens and organophosphate based flame retardants). Scientific studies show that these chemicals can migrate out of the products and into our air, dust and water. These chemicals then find their way into our food, bodies and the environment. Many of these chemicals are known to be persistent, bioaccumulative and toxic. Scientific studies in humans show changes in thyroid and reproductive hormones, alterations in the male reproductive tract, reduced sperm quality, and adverse impacts on brain development associated with higher exposures to various flame retardants. Some flame retardants are mutagens and likely to be carcinogenic.

Most notably, these chemicals have not been shown to actually improve fire safety in furniture and instead have led to the widespread use of, and exposure to, flame retardant chemicals nationally.

As your company frequently supplies the **[Organization]** with furniture products, we want to notify you that once TB 117-2013 is fully adopted by manufacturers in January 2015, we will seek and prefer those products that do not contain flame retardant chemicals. Thus, we encourage you to work with your supply chains to eliminate these flame retardants from the products you sell and move to safer alternatives.

As part of this switch to safer alternatives we encourage your company to provide a publicly available Health Product Declaration (HPD) (<http://hpdcollaborative.org/>) and/or Declare Label for the products you sell. The transparent disclosure of this information in a consistent manner enables us to make fully informed purchasing decisions and the **[Organization]** is currently considering whether to require HPDs in future furniture solicitations.

We also urge your company to consider endorsing and implementing principles for safer chemicals such as those developed by the Business-NGO Working Group (<http://www.bizngo.org/safer-chemicals/principles-for-safer-chemicals>).

Thank you for your attention to this issue. We ask that you respond to this letter with relevant information about what you may already be doing to identify, disclose, and eliminate hazardous chemicals like flame retardants from products you make or sell, and/or plans you have to provide products free of flame retardant chemicals after January 2015.

Sincerely,

[Purchasing Manager, Project Manager, Analyst, Sustainability Manager or other relevant staff]

Vendor Letter - General

The following sample letter is drafted for communicating more generally about healthier buildings and future solicitations. It should be customized for your organization by changing the **[bracketed]** language.

[Date]
[Company]
[Attention]
[Address]

Re: Changes to future solicitations to encourage healthier buildings

To Whom It May Concern:

[Organization] is committed to protecting the health of the public, our employees, and our natural environment.

Doing business with companies that are responsible and offer the best overall value is also an important of our efforts. Our emerging perspective on the quality of goods and services is one that includes consideration of chemical hazard and toxicity to humans and ecosystems. When factors like cost and availability are the same, products that avoid chemicals of concern and use safer alternatives represent a better value in our opinion.

Future contracts from **[Organization]** may include specifications or requirements related to chemical hazard disclosure and avoidance. This information will help us make more informed decisions.

Our initial focus includes goods and services purchased to design, construct, and maintain buildings. One reason we are focused on our built environment because there is strong industry leadership in green building services and products. Research also shows that there is strong potential for extended exposure to hazardous chemicals given the amount of time we spend indoors.

[Organization] wants to take a harmonized approach and use existing tools to support our healthy purchasing efforts. We believe it will save time and money for us both. For example, some future contracts may require that vendors request product manufacturers to publicly disclose chemical ingredient hazard(s) through a Health Product Declaration (HPD) (<http://hpdcollaborative.org/>) and/or Declare label and use that information to identify products that are safer for people and ecosystems.

We also urge your company to consider endorsing and implementing principles for safer chemicals such as those developed by the Business-NGO Working Group (<http://www.bizngo.org/safer-chemicals/principles-for-safer-chemicals>).

Thank you for your attention to this issue. We ask that you respond to this letter with relevant information about what you may already be doing to identify, disclose, and eliminate hazardous chemicals like flame retardants **[or other relevant classes of chemicals/chemicals of concern]** from products you make or sell.

Sincerely,

[Purchasing Manager, Project Manager, Analyst, Sustainability Manager or other relevant staff]

Relevant resources

Oregon Department of Administrative Services Green Chemistry Procurement Guidelines

These guidelines are designed to helping agencies to procure safer products and reduce chemicals of concern, protect public health, and foster innovation by encouraging the design and use of safer products through procurements and awards.

Leadership in Energy & Environmental Design (LEED)

LEED is a green building certification program that recognizes best-in-class building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each rating system, and teams choose the best fit for their project. Points are awarded in the USGBC's LEED v4 standard for products verified to minimize the use and generation of harmful substances using the GreenScreen® for Safer Chemicals. [Link](#)

GreenScreen for Safer Chemicals

GreenScreen for Safer Chemicals is a scientifically based, open method for assessing how chemicals can impact human health and the environment. It is used by a wide range of professionals, governmental bodies, non-profits, businesses, formulators, and product developers. [Link](#)

Health Product Declaration

The Health Product Declaration (HPD), an impartial tool for the accurate reporting of product contents and each ingredient's relationship to the bigger picture of human and ecological health. The HPD objectively defines the critical information needed to support accurate supply chain disclosure by manufacturers and suppliers, and informed decisions by building designers, specifiers, owners, and users. [Link](#)

The Living Building Challenge Red List

The Living Building Challenge™ calls for the creation of building projects at all scales that operate as cleanly, beautifully and efficiently as nature's architecture. It is a building certification program, advocacy tool and philosophy that defines the most advanced measure of sustainability in the built environment. Certification requires compliance with all aspects of seven performance categories called Petals: Place, Water, Energy, Health & Happiness, Materials, Equity and Beauty. The Materials Petal, which includes a 'Red List' of banned chemicals, is designed to encourage a healthy materials economy that is non-toxic, transparent and socially equitable. [Link](#)

Declare

Declare® is a program of the International Living Future Institute and a transparency tool created in support of the Living Building Challenge Materials Petal requirements and aligned with the Red List. The program is relevant to all parties seeking product ingredients and source location information. By providing a clear and informative "nutrition label" and a publicly accessible database of building products, Declare facilitates effective communication between manufacturers, building product specifiers and consumers. [Link](#)

Perkins+Will Precautionary List

Design and planning firm Perkins+Will has developed a precautionary list used in their projects. The list is searchable by chemical name, category of chemicals, health effects, and divisions and sections is intended for product specifiers and building owners, but is useful for everybody in the building design and construction industry.

Healthy Building Network Pharos Project

The Pharos Project encourages manufacturers to disclose all ingredients in building products; helps architects, designers and building owners avoid using products that contain harmful chemicals; and creates incentives for product redesign and modification to reduce the impacts of hazardous materials use throughout the lifecycle of building products.

Office Furniture Survey and Guide

The Center for Environmental Health provides guidance for purchasers in “Kicking Toxic Chemicals Out of the Office: An Easy Guide to Going Flame Retardant-Free”, along with information about manufacturers that make office furniture without toxic flame retardant chemicals.

Cost of Green Revisited

This Davis Langdon report evaluated the feasibility and cost impact of sustainable design in the light of increased market adoption. Key findings include: Many projects are achieving LEED within their budgets, in the same cost range as non-LEED projects, construction costs have risen dramatically, but projects are still achieving LEED, and the idea that green is an added feature continues to be a problem.

The Business Case for Green Building

The U.S. Green Building Council has assembled an impressive set of data and information about the cost effectiveness of green building. Included in the findings are that LEED buildings, including those that use safer, less toxic products, lead to improved health and productivity benefits for tenants.

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