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**Creating a Sustainable Fabric Alliance Program at Kaiser Permanente:  
A Case Study****Case Study Participants****Kaiser Permanente Representation:**

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**Creating a Sustainable Fabric Alliance Program at Kaiser Permanente:  
A Case Study**

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## **Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study**

### **Executive Summary**

In 1996, Kaiser Permanente (KP) developed the Fabric Alliance Program to insure a uniform quality level for fabrics, and to consolidate the volume of fabric purchased in a year to a small group of fabric vendors. It also established a per yard cost cap for all upholstery, cubicle curtains, and draperies used in KP facilities, and established criteria for fabric selection including performance criteria, fabric content, and maintenance. Additionally, the program created informal relationships with a limited number of nationally recognized fabric vendors. The original Fabric Alliance Partners were Architex, Designtex, Maharam, and Momentum Fabrics.

The Fabric Alliance program is still in effect today. However, in the summer of 2006 a group of core team members from the National Facilities Services, Strategy Planning and Design team realized that significant improvements were needed in order to incorporate environmentally sustainable products into the alliance, and to further reduce costs. Moreover, it was anticipated that the new sustainable fabric selections and cost reductions would be a perfect opportunity to reinforce the Kaiser Permanente brand position of "Total Health" in all its physical environments.

Using the Sourcing and Standards Team (SST) and Content Expert Panel (CEP) processes, Kaiser Permanente National Facilities Services, in partnership with Procurement and Supply, created a Sustainable Fabric Alliance Program. The process to create this program was rigorous. It included continuous research and data gathering; narrowing the field of vendors using two fabric industry surveys; presentations; and extensive vendor interviews.

In November 2007 Procurement and Supply and National Facilities Services (NFS) completed formal pricing agreements with three fabric vendors – Designtex, Maharam, and LDI Corporation - resulting in the creation of the new Sustainable Fabric Alliance Program. With the reduction from four to three fabric vendors in the Alliance program, the three vendors will obtain increased volumes. KP will use only sustainable fabrics at a substantial savings, compared to the fabrics in the current alliance program.

The Furniture Sourcing and Standards Team in partnership with P&S will develop communication and implementation tools, and the team will work with KP stakeholders to ensure that the decisions made by the CEP are incorporated into the KP Standards Program. Members of the Strategy Planning and Design team will also work to ensure that fabrics with varying degrees of sustainable attributes, including Category I and II woven fabrics and synthetic leather fabric fabrics, are graded into the KP Furniture Standards Program. A transition period will ensure that program implementation will not adversely impact current project schedules and budgets.

Through extensive communication and sharing of its findings, Kaiser Permanente will leverage the fabric industry to move towards more sustainable products. KP will also continue to study and bring attention to important environmental, health and safety issues, and will use its purchasing power to transform the industry. Ultimately, the extent to which these changes affect our choices as designers, architects and health care professionals is determined by our willingness to meet and share our concerns with market leaders and our resolve to make changes individually and within our own organizations.

## **Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study**

### **Introduction**

In 1996, Kaiser Permanente (KP) developed the Fabric Alliance Program to insure a uniform quality level for fabrics, and to consolidate the volume of fabric purchased annually to a small group of fabric vendors. It also established a per yard cost cap for all upholstery, cubicle curtains, and draperies used in KP facilities, and established criteria for fabric selection including performance criteria, fabric content, and maintenance. Additionally, the program created informal relationships with a limited number of nationally recognized fabric vendors. The original Fabric Alliance Partners were Architex, Design Tex, Maharam, and Momentum Fabrics.

The Fabric Alliance relationships were informal because most fabric at Kaiser Permanente was purchased through third parties. For example, upholstery fabric is purchased through furniture manufacturers, and cubicle and drapery fabrics are purchased through general contractors and their sub-contractors or through the Materials Management or Environmental Services departments at local medical centers.

The Fabric Alliance program is still in effect today. However, in the summer of 2006 a group of core team members from the National Facilities Services, Strategy Planning and Design team realized that significant improvements were needed in order to incorporate environmentally sustainable products into the alliance. Furthermore, P&S recognized the importance of establishing cost control/cost savings for the new sustainable fabrics, compared to the current fabric line. Moreover, it was anticipated that the new sustainable fabric selections and cost reductions would be a perfect opportunity to reinforce the Kaiser Permanente brand position of "Total Health" in all its physical environments.

The purpose of this paper, then, is to discuss the original Fabric Alliance Program, and document the creation of the new Sustainable Fabric Alliance Program. The documentation of the new program details the process, and discusses the Kaiser Permanente Guiding Principles on Environmental Health. Finally, research findings, conclusions, and supporting material are provided.

### **The Original Fabric Alliance Program:**

Traditionally, furniture manufacturers offer their customers upholstery fabrics three ways:

1. **Carded:** Fabrics that carry the manufacturers own label and are installed on the manufacturer's furniture at set price points or "grades".
2. **Graded-In:** Fabrics supplied in alliance with fabric houses that further expand the manufacturer's carded offerings while charging a premium for the added selection and convenience.
3. **Customer's Own Material (C-O-M):** Fabrics purchased directly by a customer and shipped directly to the manufacturer for installation on a specified order. COMs traditionally represent the highest cost to the customer since the furniture manufacturers charge a premium for coordination and handling. These charges are applied to an order because the furniture manufacturer must purchase the upholstery fabric from the fabric vendor and have it shipped and received at their furniture manufacturing plant prior to manufacturing the furniture item.

Due to the added purchase order and coordination costs that COMs create, KP policy was to limit the use of COM fabrics. However, the elimination of COM fabrics created a very limited supply of fabric choices available to Kaiser Permanente interior design consultants. In order to increase the number of selections available from the furniture manufacturers, KP negotiated with both the members of the Fabric Alliance and the furniture manufacturers in the Furniture Standards Program to grade-in fabric alliance selections into the standard furniture manufacturer's catalogs at the predetermined per yard cost caps. KP further convinced furniture dealers and manufacturers to provide these selections under a single purchase order similar to carded and graded-in programs. The result is a program that controls unit costs, consolidates fabric purchases to a small group of vendors, and streamlines the ordering process, while also reducing manufacturing errors and delays.



## Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study

In 2006, in order to increase the number of fabric selections available to interior design consultants, the per yard cap cost was increased from \$35 per yard to \$46 per yard.

### The Procurement Process:

The Kaiser Permanente Procurement and Supply (P&S) Department and the National Purchasing Council (NPC), have created a process for the research, selection, and purchase of products and services purchased directly by Kaiser Permanente. P&S and the NPC partner with departments such as National Facilities Services (NFS) and National Environmental Health and Safety (NEHS) to execute a multi-disciplinary, consensus driven process that requires collaboration and communication across nine national Regions. This process utilizes Sourcing and Standards Teams (SSTs), consisting of KP content experts and procurement representatives who meet on a regular basis to discuss business requirements, products, and purchasing needs. Currently, there are forty-two SSTs that provide product research and expertise in the following areas:

- Medical specialties include Anesthesia, Audiology, Cardiology, Dermatology, Gastroenterology, Head and Neck Surgery, Neurology, Neurosurgery, Obstetrics and Gynecology, Occupational Medicine, Eye Care Services, Orthopedics, Pain Medicine, Pediatrics, Podiatry, Surgery, and Urology.
- Technical and clinical services SSTs include Biomedical Engineering, Disinfection, Facilities Engineering, Information Technology, Physiologic Monitoring, Physical Therapy, Respiratory Therapy, and Sterilization.
- Non-Medical commodities include Furniture, Linen, Printing and Documents.
- Radiology services teams include Nuclear Medicine, Imaging, and Radiation Therapy.
- Equipment such as Beds and Stretchers, Pumps and IVs, and Laboratory Services
- Key service departments such as Environmental Health and Safety, Environmental Services, Material Management, Optical Sales, Pharmacy, Security, and Workplace Safety

When research is required by the SSTs, sub-groups of Content Expert Panels (CEPs), which are made up of a cross section of internal (and sometimes external) content experts and stakeholders, are convened. These voluntary panels include representation from Procurement and Supply as well as the Labor Management Partnership, a Coalition of Kaiser Permanente Unions (CKPU). The focus of a Content Expert Panel is to provide in-depth research as well as recommendations to the SSTs where final decisions are made.

In addition to SSTs and the CEPs, Kaiser Permanente leadership plays a significant role as sponsors at the regional and national levels. While the SST must obtain approval on recommendations at the national level, it is at the regional level where the recommendations and programs are implemented. For example, in 2005, the Furniture SST attempted to reorganize the original Fabric Alliance. A CEP was organized and a review was conducted. Nonetheless, no recommendations were made as members of the CEP were unwilling to reduce the number of fabric vendors or limit the number of fabric lines offered by the Fabric Alliance.

### Environment Stewardship - “Guiding Principles” on Environmental Health:

Kaiser Permanente has long been committed to addressing environmental health issues and is a leader in promoting environmentally sustainable solutions in the health care industry. Promoting and standardizing on Nitrile gloves, PVC-free carpet, permeable asphalt, and PVC-free resilient flooring represent just a few of the innovations that KP has championed in the health care field. In this leadership role, KP developed the Environmentally Preferable (or Preferred) Purchasing policy (EPP) in 2006.<sup>1</sup> Authored by KP’s Environmental Stewardship Council, the EPP adheres to the “Precautionary Principle” which stipulates that when there is credible evidence linking a material to an environmental or public health issue, one should strive to replace it with safer alternatives. As a result, the EPP mandates all KP staff, contractors and consultants to “evaluate the environmental impacts (e.g., waste, toxicity) of products and services in their effort to select safe products and services that are also environmentally sound.” The policy further requires that KP personnel work with vendors to introduce and promote sustainability in the marketplace at cost competitive prices. Thus the EPP provided a framework for the Furniture SST to reassess fabrics and the role of the current Fabric Alliance.

<sup>1</sup> See Appendix A for a copy of this document.

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Acknowledging that environmental factors are not the only criteria for purchasing decisions at KP, the EPP provides guidelines to KP staff to make decisions that will over time “[improve] the health of [KP] members, staff and communities by reducing exposure to toxic substances.” KP’s EPP calls on KP purchasers to “avoid products containing” materials and chemicals that are implicated in health issues. When specifically applied to upholstery, cubicle curtains, and drapery fabrics, the EPP requires that the following substances be avoided:

- Persistent Bioaccumulative Toxic (PBT) compounds
- Carcinogens, mutagens and reproductive toxic chemicals
- Halogenated Flame Retardants (HFRs)
- Phthalates
- Polyvinyl chloride (PVC)

The Environmentally Preferable (or Preferred) Purchasing policy also urges purchasers to promote products that do not adversely affect indoor air quality; have a high post-consumer recycled content; are readily recycled, reprocessed, and/or reused; and do not contain or contain a reduced amount of toxins.

In addition to the EPP, KP National Environmental Health and Safety department authored a position paper on antimicrobial treatments as well as an assessment of KP’s furniture and equipment standards programs to identify toxic materials that are inherent in these products. The results were two-fold: NEHS found no compelling reasons to specify antimicrobial treatments in products as an infection barrier; while the Standards Program Assessment (Executive Summary) reported on the extent to which Persistent Bioaccumulative Toxic (PBT) compounds and Halogenated Flame Retardants (HFRs) were present in KP’s standard products. As a result, these efforts provided compelling reasons and further impetus for the CEP to investigate sustainable practices.

Armed by the EPP Policy, a collaborative multi-disciplinary procurement process and the desire to leverage the market to move towards offering sustainable fabrics to the health care industry, the team began their work to create a new Fabric Alliance Program for Kaiser Permanente.

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### **The Process to Create a New Fabric Alliance Program**

National Facilities Services leadership asked the Furniture SST to convene a Content Expert Panel, made up of in-house content experts and interior design consultants to redefine the Fabric Alliance Program. Procurement and Supply aimed to formalize the relationship with the Fabric Alliance vendors through pricing agreements while National Facilities Services wanted to incorporate sustainable practices and fabrics into the program.

As a diverse group of multi-disciplinary stakeholders were participating in the process, KP staff recognized that to achieve the desired goals, the CEP needed to have a common understanding of the environmental issues involved in sourcing fabrics. NFS staff and consultants introduced KP’s history on environmental issues and shared KP’s Environmentally Preferable (or Preferred) Purchasing policy. Information about the key toxicants that are found in fabrics was discussed and a background on the current state of recycled content and fabric recyclability was provided. In turn, the CEP more readily identified challenges within the industry (as well as within KP) that needed to be addressed in order to source more environmentally responsible fabrics.

For many of the Content Expert Panel participants and stakeholders, environmental considerations had never played a key role in their decision-making processes beyond considering recycled content. While some were aware of KP’s EPP, most had not been provided with the scientific support or rationale behind the policy, particularly with the human health concerns underlying the chemicals and materials to avoid. Performance, customer service, and aesthetic issues were the primary considerations when choosing fabric and fabric vendors. Environmental issues were either undervalued or not considered at all.

## **Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study**

The importance of the educational process provided cannot be overemphasized. Rather than asking the team to accept KP's environmental concerns without question, KP staff and consultants invested time and resources into bringing pertinent environmental information and considerations to all the participants and stakeholders. Ultimately, everyone was equipped to consider the variety of fabric offerings provided by the fabric vendors in the context of human and environmental health concerns.

### **Research and Data Gathering:**

The research and data gathering process was a four step process. The first step in the process was to create a list of fabric vendors recommended by Kaiser Permanente interior design consultants. The second step was designed to gather information from these fabric vendors on the environmental attributes of health care fabric. In order to achieve this, KP and its consultants sent a pre-qualifying survey, or Request for Information, to the list of vendors.<sup>2</sup> This pre-qualifying survey was sent to seventeen fabric vendors, including many of the largest contract fabric vendors in the country. In the end, only twelve of the seventeen vendors responded to the survey.

The pre-qualifying survey asked a number of questions about sustainable product practices and fabrics, including:

- What percentage of the company's entire offering the sustainable products represented
- Whether those product lines included key chemicals and/or materials of concern<sup>3</sup>
- Whether the products had received any indoor air quality (IAQ) certification for low Volatile Organic Compound (VOC) emissions
- The percentage of recycled content in their sustainable products
- Whether products were recyclable or compostable
- General questions about the corporations' environmental policies and plans for sustainability into the future

In summary, all but one company offered limited products free of PVC and HFRs. Most companies offered recycled or bio-based content products or recyclable or compostable products, and about 75% of respondents had (limited) products tested for indoor air quality. Environmental policies ranged from those companies having no environmental policy in place ("Goal is to make money"), to those companies that are making broad commitments to being, "leader(s) in sustainable materials....we've adopted environmentally sound practices...." A few companies stated that they had very rigorous protocols in place to evaluate the use or non-use of PBTs. Some are not using them at all. A few companies identified tough benchmarks to mark their environmental progress.

At the end of step two, it was determined that while the information from the twelve companies was valuable to understand the commitments each was making, it did not provide enough detail to enable the CEP to narrow the number of vendors for the next stage of inquiry. As a result, eleven of the twelve responding vendors were asked to continue to the third step - the detailed survey.<sup>4</sup>

The third step was rigorous in that it required the vendors fill-out a full survey for each individual family of fabrics for consideration, which for some companies, required more than ten different detailed responses. Moreover, the fabric vendors were asked to provide a list of their sustainable products as well as extensive questions regarding their commitment to sustainability. Finally, they were asked to include any information on additional environmental issues for health care fabrics not yet identified by the survey.

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<sup>2</sup> See Appendix B for a copy of this survey

<sup>3</sup> As stipulated in the EPP.

<sup>4</sup> The twelfth company lost its key U.S. sale representative and chose to pull-out of the process at that time. To view a sample scorecard that summarized the information requested in this survey, see Appendix C



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The survey required manufacturers to identify:

- The full material content of the fabrics and any treatments, including whether the products contained polyvinyl chloride (PVC), halogenated compounds or flame retardants (HFRs), perfluorochemicals (PFCs), volatile organic compounds (such as formaldehyde), and other chemicals of concern (fiberglass, heavy metals, antimicrobials, fungicides, and other persistent bioaccumulative toxicants)<sup>5</sup>
- Any indoor air quality emission tests the fabrics had passed<sup>6</sup>
- Recycled fabric content, specifically pre-consumer and post-consumer recycled content
- Performance results for standardized test data developed by the Association for Contract Textiles (ACT)
- Recyclability and other end of life issues, including identifying leaching or off-gassing issues at end of life of the product
- Product transportation and packaging information

Throughout steps two and three, the pre-qualification and detailed survey processes, and prior to in-person meetings with vendors, not one fabric vendor required KP to sign a non-disclosure agreement regarding the information that they provided to the CEP.<sup>7</sup>

The consultants then accumulated and analyzed the responses for the CEP. They reviewed each family of fabrics focusing on key toxicants, indoor air quality issues, and recycled content, and separately on the fabric finishes.<sup>8</sup> Based on the survey responses, the team developed the criteria and a scorecard to evaluate the vendors.

Additional information on the major fabric finishes and treatments used in the industry was critical to understanding the full health and environmental impact of the fabrics presented to Content Expert Panel. The CEP team analyzed and evaluated the manufacturer responses while the consultants identified key issues for future in-person meetings with each of vendors. The CEP also chose which vendors would be invited to continue to step four, which was a presentation of their fabric lines.

### **Narrowing the Field:**

In spite of the fact that twelve vendors had been invited to respond to the second detailed survey, the legacy Fabric Alliance partners had clear advantages over the other candidates due to their long history with Kaiser Permanente. CEP members recognized that sustainable issues negatively impacted a few of the vendors, but a history of excellent product quality and customer service weighed heavily in the decision to bring the vendors in for face-to-face presentations. As a result, all four legacy Fabric Alliance partners were invited to continue to step four, a presentation before the CEP. In addition, four small to medium-size companies, well known for their commitment to design excellence and sustainable attributes, were invited.

To provide a complete picture of the market, four companies that manufacture treatments or finishes which add stain resistance, ease of maintenance and/or moisture resistance to fabrics, were asked to team up with fabric vendors who offered these treatments and finishes as a part of their fabric lines. Finally, at the eleventh-hour one manufacturer indicated that they were close to making a major technological breakthrough in non-

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<sup>5</sup> For a detailed description of the chemicals and materials of concern associated with fabrics, please see the companion paper "Future of Fabric: Health Care" from Health Care Without Harm and the Healthy Building Network, October 2007.

<sup>6</sup> For a detailed description of the indoor air quality emissions standards and certifications relevant to fabrics, please see the companion paper "Future of Fabric: Health Care" from Health Care Without Harm and the Healthy Building Network, October 2007.

<sup>7</sup> Some of the finish and/or treatment manufacturers did require non-disclosure agreements prior to the in-person meetings.

<sup>8</sup> As the process unfolded, the team identified the need to question directly the finish manufacturers about the environmental issues associated with their products. As a result, KP developed a short survey for finish manufacturers in anticipation of the in-person meetings and to create a scorecard for their materials as well.



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petroleum based synthetic leather fabrics. As a result, the CEP asked this manufacturer to continue in the selection process.

### Vendor Presentations:

Prior to inviting the vendors to present their product lines to the Content Expert Panel, the team grouped the vendors into three separate categories.

*Group One* vendors were those that integrated sustainability into their fabric program by creating a program and a timeline for implementation. These vendors worked directly with fabric and treatment manufacturers to introduce sustainable practices into the fabric industry, and they diverted a portion of their revenues back into research and development, and had research professionals on their staff. Category One vendors were active in identifying new issues and solutions as opposed to waiting for market trends to dictate action, and they are successful at providing well-designed fabrics that are sustainable as well.

*Group Two* vendors were small and medium sized “boutique” vendors that typically had owner representation at the meeting and superior design lines and quality. These vendors were highly driven entrepreneurs who were committed to sustainability, and were limited to the type and amount of research and development.

*Group Three* vendors were those that were service and price-value leaders, and they utilized third party consultants or programs (such as LEED<sup>9</sup>) to represent environmental standards. They primarily associated sustainability with recycled content, and they often lacked a clear vision of complex environmental issues. These vendors could not justify investment into sustainability without a guaranteed Return on Investment (ROI) and they appeared to not have a research and development program.

### Finish and Treatment Manufacturers:

During this phase of the project, the Content Expert Panel also interviewed fabric finish and treatment manufacturers. The companies interviewed focused on the stain resistance and moisture blocking capabilities that are so important to the health care industry. Two general categories for fabric treatments and finishes manufacturers appeared.

The *first category* of fabric treatments and finishes was those that used Teflon<sup>®</sup> or Teflon-like finishes. Typically these chemicals are persistent, bioaccumulative toxicants (PBTs), which means that they are chemicals that persist in the environment, they bioaccumulate up the food chain, and are toxic to animals and/or humans. These finishes are perfluorocarbons (PFCs), related to the chlorofluorocarbons (CFCs) that have been banned because of their ozone-depleting effects. They can pass—from a mother to the fetus through umbilical cord blood, are found in human breast milk, and some are suspected carcinogens.

The *second finish and treatment category* focused on nanotechnologies. Nanotechnology is defined as the study and use of structures between 1 nanometer and 100 nanometers in size.<sup>10</sup> As a new technology that covers a myriad of chemicals and processes, the information presented suggested that there are a number of additional issues that need to be studied. The one company stated that “the polymers used are too large to be absorbed into the skin or inhaled and...do not utilize nanochemicals that could be ingested or inhaled.”

### Decisions and Recommendations:

The CEP recommended that four vendors: Carnegie, Designtex, Maharam, and LDI Corporation. As a result, P&S sent out a Request for Proposal (RFP) to these vendors to complete a further review of their product quality, product cost, and business partnering with KP. Based on their RFP response, the selected vendors

<sup>9</sup> Leadership for Energy and Environmental Design

<sup>10</sup> To provide a visual comparison, it would take eight hundred 100 nanometer particles side by side to equal the width of a human hair. A nanometer is one billionth of a meter.

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were invited into contract negotiations with KP. Prior to negotiations, each vendor was asked to catalog their fabrics into three groups:

**Category I**—Fabrics that do not contain any chemicals of concern as outlined in the EPP. In addition, no antimicrobial treatments are used and no finishes utilizing bioaccumulative toxins are applied.

**Category II**—Fabrics that avoid at least three (3) chemicals of concern as outlined in the EPP. KP notified all three vendors that *Category II* could only be specified over the course of the initial contract, and that KP expected all vendors to develop new lines of fabric that would meet the standards of category I by the end of the first contract period.

**Category III**—Fabrics that currently do not meet any of the sustainable requirements listed in categories I or II but do meet the performance criteria<sup>11</sup> established in KP's Furniture Standards Program. KP notified all three vendors that *Category III* fabrics would be phased out at the end of the initial contract period. Significantly, KP asked each vendor to commit to reducing or eliminating fabrics and finishes that contain – PVC, HFRs, VOCs, PFCs, Heavy metals, and antimicrobials, and all four vendors agreed.

### Conclusion:

In November 2007 Procurement and Supply and National Facilities Services completed formal pricing agreements with three fabric vendors – Design Tex, Maharam, and LDI Corporation - resulting in the creation of the new Sustainable Fabric Alliance Program. Category I and II woven fabrics will be provided by Design Tex and Maharam for upholstery, cubicle curtain, and drapery fabrics, and PVC-free, synthetic leather will be provided by LDI Corporation. Category III fabrics, which are fabrics that are not sustainable, are eliminated from the program entirely. With the reduction from four to three fabric vendors in the alliance program, the three vendors will obtain increased volumes. KP will use only sustainable fabrics at a substantial savings, compared to the fabrics in the current alliance program.

Regarding fabric treatment and finishes, the CEP agreed that two recognized treatments currently offered by Designtex and Maharam can be specified as part of the Category II fabric selections: Nano-tex and Crypton Green. At the end of the contract period, Kaiser Permanente will, once again, review these finishes to determine what progress has been made to confirm that these or any other alternative solutions are the most effective treatments while mitigating concerns about bioaccumulative toxicants.

### Next Steps:

Communication and implementation tools will be developed by the Furniture Sourcing and Standards Team in partnership with P&S. In addition, the team will work with KP stakeholders to ensure that the decisions made by the CEP are incorporated into the KP Standards Program. Members of the Strategy, Planning, and Design team will also work to ensure that the Category I and II woven fabrics and synthetic leather fabric fabrics are graded into the KP Furniture Standards Program. A transition period will ensure that program implementation will not adversely impact current project schedules and budgets.

Through extensive communication and sharing of its findings, Kaiser Permanente will leverage the fabric industry to move towards more sustainable products. KP will also continue to study and bring attention to important environmental, health and safety issues, and will use its purchasing power to transform the industry. Ultimately, the extent to which these changes affect our choices as designers, architects and health care professionals is determined by our willingness to meet and share our concerns with market leaders and our resolve to make changes individually and within our own organizations.

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<sup>11</sup> See Appendix D for a copy of the Performance Criteria standards for fabrics.



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**Appendix A**

**National Environmental Purchasing Policy (Extract)**

In support of Kaiser Permanente's mission to improve the health of our members and the communities we serve, the procurement and supply staff within Kaiser Permanente are committed to the principles of Environmentally Preferred Purchasing (EPP). The National Environmental Purchasing Policy requires that the principles of Environmentally Preferred Purchasing be applied to all major purchasing decisions. Kaiser Permanente's Sourcing Core Groups, supported by purchasing and environmental stewardship staff, will evaluate the environmental impacts (e.g., waste, toxicity) of products and services in their effort to select healthy and safe products and services that are also environmentally sound. The policy also requires that KP personnel involved with product selection communicate to the marketplace that Kaiser Permanente expects suppliers to continuously develop price competitive products that conform to our EPP principles.

**Environmentally Preferred Purchasing Principles**

The following EPP principles are incorporated into the deliberations on commonly used products, especially where more environmentally friendly alternatives may be available. A statement on the outcome of these deliberations is included in all product contract recommendations. These principles will not be the sole factors in determining product selection but will be weighed with other quality, service and total cost components. They also recognize that natural resources and landfill space are limited and that the cost of disposal is increasing. Most importantly, these principles support improving the health of our members and communities by reducing exposure to toxic substances.

**General Utilization and Selection Strategy for Contracting Staff and Individual/Department Purchases**

One should consider the following elements that make an alternative preferable:

- Use less of it
- Conserve resources (e.g. use less water, energy or virgin resources to produce or use, Energy Star rating)
- Eliminate/reduce waste
- Reduce toxicity (e.g. no chlorine)
- Ability to recycle
- Comparable functionality and effectiveness
- Consideration of total cost of ownership (including unit cost, cost of waste etc.)

**Specific Environmental Criteria for all Purchasing Decisions**

Avoid products containing:

- Persistent bioaccumulative toxic compounds as defined in the Supplier Environmental Disclosure form, addendum to this policy
- Bisphenol-A
- Carcinogens, mutagens and reproductive toxic chemicals as defined in the Supplier Environmental Disclosure form, addendum to this policy
- Halogenated flame retardants
- Mercury
- Phthalates (e.g. plasticizer DEHP (di-2-ethylhexyl phthalate)
- Polyvinyl chloride (PVC)

Contact: Robert Gotto, Senior Sourcing Director, Procurement and Supply 510-625-2641. [Robert.gotto@kp.org](mailto:Robert.gotto@kp.org)

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### Appendix A (Cont.)

#### Promote the purchase of these products:

- Building products, materials and furnishings that do not adversely impact indoor air quality
- Building products, materials and furnishings that are approved by National Facilities Services Planning & Standards
- Products with high post-consumer recycled content
- Products that are readily recycled, reprocessed, and/or reused
- Products that are latex-free
- Products that do not contain or contain a reduced amount of toxins
- Products that have "Take Back" provisions
- Paper products that are chlorine-free

#### Encourage vendors to:

Package units in minimal packaging that is recyclable, non toxic or bio-based

Transport products with minimal packaging, move to bio-based packaging

Manufacture products that use less energy and water during normal use

Manufacture product that use less water and energy during manufacturing

Manufacture products with attributes listed above (i.e., chlorine-free, latex-free, non-toxic)

#### Definitions:

**Environmentally Preferred Purchasing** is the purchase of products and services whose environmental impacts have been considered and found to be less damaging to the environment and human health when compared to competing products and services

**DEHP** (di-2-ethylhexyl phthalate) is a plasticizer (softener) used to increase the flexibility of polymers like polyvinyl chloride (PVC). DEHP is the plasticizer for most PVC medical devices such as IV bags and tubing. DEHP can leach out of the flexible PVC medical devices into the solution or medication it contains and subsequently into the patient. Animal studies indicate that DEHP is a potentially reproductive and development toxicant

**Green Buildings** is the practice of creating healthier and more resource-efficient models of design, construction, renovation, operation, maintenance and demolition. Elements of green building include, but are not limited to, designing and operating buildings to use energy efficiently and to use renewable sources of energy, including solar and wind; use water efficiently; use building materials that, in comparison to competing brands, have a reduced effect on the environment throughout their life cycle (e.g. recycled content, low toxicity, energy efficiency, biodegradability, and/or durability); reducing the waste from construction, remodeling, and demolition; designing and operating buildings that are healthy for their occupants. Reference Green Guidelines for Healthcare Construction

**Creating a Sustainable Fabric Alliance Program at Kaiser Permanente:  
A Case Study****Appendix B****Kaiser Permanente – Pre-Qualifying Questionnaire on Sustainable Textiles (Extract)****Background**

Kaiser Permanente (KP) exists to provide:

- Affordable, high-quality health care services
- To improve the health of our members and the communities we serve.

KP is the nation's largest nonprofit public benefit health plan with locations in eight Regions:

<b>Northern California</b>	<b>Ohio</b>
<b>Southern California</b>	<b>Maryland (Mid-Atlantic)</b>
<b>Georgia</b>	<b>Colorado</b>
<b>Hawaii</b>	<b>Oregon (Northwest)</b>
<b>Virginia (Mid-Atlantic)</b>	<b>Washington (Northwest)</b>

We serve approximately 8.2 million members with 140,000 employees and 12,000 physicians. In addition, Kaiser Permanente's Information Technology (KP-IT) is a nationalized department, which is part of Kaiser Foundation Hospitals.

- Kaiser Permanente is comprised of three main corporations:
- Kaiser Foundation Health Plan, Inc. (KFHP), and its subsidiaries
- Kaiser Foundation Hospitals
- The Permanente Medical Group

These three entities are collectively referred to as the Medical Care Health Program. Kaiser Foundation Health Plan, Inc. is a California nonprofit public benefits corporation that enrolls members and arranges for medical, hospital and related services in Northern and Southern California and Hawaii. As such, KFHP issues contracts for goods and services on behalf of its subsidiaries and The Permanente Medical Group and Southern California Permanente Medical Group.

**Purpose**

The purpose of this survey is to provide Kaiser Permanente with information to determine which firms can best meet the business objectives for the fabric program by reducing costs and consolidating the number of suppliers while increasing the use of sustainable textiles and improving quality, delivery, development and services.

For those manufacturers and "Fabric Houses" that we select in response to this survey, National Facilities Services (NFS) intends to send out a more extensive RFP/I that will help to define our policy for purchasing fabric and determine who we will engage to purchase fabric in the future. The results of the follow up request will be presented to a Content Expert Panel (CEP) that will review the results and make recommendations to the internal KP group that sets standards for purchasing furniture.



Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study

Appendix B (Cont.)

Commercial Requirements

1. Have you previously worked with Kaiser Permanente? If yes, please state product / service sold and Gross Annual Sales:

Table with 4 columns: Region, Product/Service, Quantity (if pertinent), Gross Annual Sales. Rows include Northern California, Southern California, Colorado, Georgia, Hawaii, Mid-Atlantic, Ohio, Northwest.

- 2. Financial Information – a. Provide gross sales for all Regions for 2005 and through third quarter of 2006. b. State the number of customers that represent your gross sales for 2005 and to date in 2006.
3. Indicate your lead times to deliver fabric products to the KP regional offices identified in (1) above. Include time for a) drop ship to local upholsterer and b) delivery to KP nationally approved supplier.
4. KP includes both furniture and fabric lines on a single purchase order. Are you willing to participate in this system and work with the following approved furniture suppliers?

Bay Concepts La-Z-Boy
Brandrud Loewenstein
Gunlocke Nemschoff
Harter Haworth
Steelcase

5. Provide a list of fabrics and styles you offer within the following fabric categories. In addition, include a description of standards for durability within each category and standard pricing.

Upholstery (public seating – sixty thousand (60k) double rub minimum): \$ /yd.
Cubicle Curtains: \$ /yd.
Draperies: \$ /yd.

6. Provide three (3) customer reference contacts (name and phone number) for your products and services.

Sustainability Pre-Qualification Questions

1. Do you have product lines for the following healthcare textile lines that do not contain polyvinyl chloride (PVC), or halogenated flame retardants (HFRs) such as polybrominated diphenyl ethers (PBDEs)? List your product lines for healthcare that do not contain:

a. PVC



**Creating a Sustainable Fabric Alliance Program at Kaiser Permanente:  
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**Appendix B (Cont.)**

- b. Halogenated flame retardants (HFRs). Halogenated flame retardants contain bromine, chlorine, fluorine, or iodine atom bonded to a carbon atom. HFRs include, but are not limited to, PBDEs (Polybrominated diphenyl ethers), Tetrabromobisphenol-A (TBBPA), Hexabromocyclododecane (HBCD), Deca-BDE (Decabromodiphenyl ether), Tris (2-chloroisopropyl phosphate) (TCPP), Tris (2-chloroethyl) phosphate (TCEP), and Dechlorane Plus (TM).
  - c. What percentage of (a) and (b) above does this represent of your line?
2. Have any of your products passed CA 01350, or another third party VOC emissions test?
    - a. List the test and fabric associated with the test:
    - b. What percentage does this represent of your line?
  3. Do you have product lines with recycled or bio-based content?
    - a. List them:
    - b. What percentage does this represent of your line?
  4. Do you have product lines that are recyclable or compostable?
    - a. List them:
    - b. What percentage does this represent of your line?
  5. Will you be expanding the lines that meet any of the above criteria in the future? If so, when?
  6. List the name, city, state, zip code and country of the manufacturing facilities that supply material for the products that you have listed above:
  7. Describe in brief your corporate environmental policy:
  8. List any current programs in your company to reduce the use or creation of persistent bioaccumulative toxicants (PBTs) or to reduce pollution and other environmental impacts from your products' life cycle:
  9. Identify any benchmarks against which your environmental progress is being measured:
  10. Describe in brief what your company is doing to protect occupational safety and workers rights beyond the standards mandated or typical practice for the industry:

Thank you for your participation in this survey. To be considered for the next phase of this project, please respond no later than Monday, December 18<sup>th</sup>, 2006.

If you have any questions pertaining to this questionnaire please forward them to:

Michael C. Schroeder, Project Coordinator  
Michael.C.Schroeder@kp.org



## Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study

### Appendix C

Fabric CEP Score Card - Environmental Attributes - Indiv Fabrics					
Fabric Alliance Content Expert Panel					
Vendor/Manufacturer Name: Fabric House goes here					
Textile Family: Name of textile family here					
Textile type: Upholstery or cubicle curtain here					
Patterns:					
Woven or non-woven:					
Standard treatment or finish: finishes or backings here - Cryton Green, Nanotex, Gore, acrylic backing or Teflon					
Date: 3/14/07					
Question Number	Sustainability Criteria: Level 1 Fabric	Yes/No or cert.	Points Value	Points for textile	Ranked score (0-5)
1	Does family of textiles contain any halogenated flame retardants? [1 point if fabric and standard treatments and finishes are HFR-free]		No = 1    Yes = 0		
3	Does family of textiles contain any formaldehyde [1 point if fabric and standard treatments or finishes are free of formaldehyde]		No = 1    Yes = 0		
4	Does family of textiles contain any additional VOCs? [1 point if fabric and standard treatments or finishes are free of additional VOCs]		No = 1    Yes = 0		
5	Does the family of textiles contain perfluorinated compounds? [1 point if no PFCs for fabric and standard treatments or finishes]		No = 1    Yes = 0		
6	Does the family of textiles contain any heavy metals? [1 point if fabric and standard treatments and finishes are free of heavy metals]		No = 1    Yes = 0		
7	Does family of textiles contain any Proposition 65 chemicals? [1 point if fabric and standard treatments and finishes are free of Proposition 65 chemicals]		No = 1    Yes = 0		
8	Does family of textiles contain any other persistent bioaccumulative toxicants? [1 point if fabric and standard treatments and finishes are free of PBTs]		No = 1    Yes = 0		
9	Does the family of textiles come with anti-microbials added as standard? [1 point if fabric and standard treatments and finishes are free of antimicrobials]		No = 1    Yes = 0		
10	Has product gone through any IAQ certification standards? [1 point if certified for GreenGuard, MBDC Gold or Silver, Oeko Tex, 2 points for Section 01350 level - CHPS, Indoor Adv. Gold, GG Children and Schools]		No = 0 GG = 1 CA 01350 or equiv = 2		
11	Is product made from post-consumer recycled content? [1 point if post-consumer recycled, even if only some products and only a small percent of product is actually post-consumer]		No = 0    Yes = 1		
<b>Total Score</b>	<b>Level 1</b>		<b>11</b>	<b>0</b>	
	Sustainability Criteria: Level 2 Treatment		Points Value		Ranked score (0-5)
1	Are any treatments or finishes standard to the family of textiles? [1 point if no treatments or finishes are standard]		No = 1    Yes = 0		
2	Does standard treatment or finish include acrylic backing? [1 point if no acrylic backing]		No = 1    Yes = 0		
3	Does standard treatment or finish include latex? [1 point if no latex identified]		No = 1    Yes = 0		
4	Does standard treatment or finish include Teflon? [1 point if no Teflon]		No = 1    Yes = 0		
5	Can textile only be specified with treatments or finishes? [1 point if product can be manufactured without treatment or finish]		No = 1    Yes = 0		
6	Would removing backing or finishes affect the warranty of the textile? [1 point if it does not affect warranty or company said "N/A"]		No = 1    Yes = 0		
<b>Total Score</b>	<b>Level 2</b>		<b>6</b>	<b>0</b>	
<b>Total Score</b>	<b>Level 1 &amp; 2</b>		<b>17</b>	<b>0</b>	



**Creating a Sustainable Fabric Alliance Program at Kaiser Permanente:  
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**Appendix D**

**General Fabric Performance Criteria**

1. All fabric purchasing is guided by the prescriptions and/or intent of Kaiser Permanente's (KP's) Environmental Precautionary Purchasing policy that requires that precautionary principles be applied to all fabric purchasing decisions.
  - A. KP Supply Chain Process: both the furniture item and upholstery fabric is purchased under one purchase order. The furniture manufacturer bears the responsibility of ordering and coordinating both items without any addition to the contract stipulated lead-time.
    1. Please refer to RFP section for defining your business plan as to how you will integrate with KP approved furniture manufacturers.
  2. Upholstery Fabric Selection
    - A. Wool, synthetics, and synthetic leather fabric, PVC-free, impermeable fabric upholsteries are acceptable to use at KP facilities.
      1. Fabric made of 100% cotton is not to be specified.
    - B. Fabric selections must meet a minimum high wear durability of 50,000 double rubs (Wyzenbeek method) for public waiting areas and 60,000 double rubs for other areas.
    - C. Use only medium to dark colors and patterns for upholstery fabrics.
    - D. In keeping with the EPP, fabrics that contain or, cause the release (during production or destruction) of the following components are to be avoided:
      1. Persistent Bioaccumulative Toxic compounds (PBTs)
      2. Bisphenol-A
      3. Carcinogens, mutagens and reproductive toxic chemicals as listed in CA Prop 65
      4. Halogenated flame retardants
      5. Mercury
      6. Phthalates (e.g. plasticizers, DEHP)
      7. Polyvinyl chloride (PVC)
      8. Anti-microbials
    - E. Catalog fabric lines in order of compliance to the guidelines as they are categorized below.
      1. Category I: Meeting the following Sustainable qualities now -
        - a. No Persistent Bioaccumulative Toxins (PBTs)
        - b. No Halogenated Flame Retardants (HFRs)
        - c. Meet CA 01350 standards or Green Guard for Children and Schools
        - d. Do not contain toxins or carcinogens listed in CA Prop 65
        - e. Do not contain heavy metal dyes
        - f. No Mercury
        - g. Do not contain Perfluorocarbons (PFCs-Teflon finish) or Nano-Technology
        - h. No Anti-microbial treatments
      2. Category II: Meets 3 minimum qualities outlined above and are scheduled to meet sustainable standards within 2 years or will be phased out of program.
      3. Category III: Unable to meet sustainable traits now or in the foreseeable future. (It is assumed that this category will be phased out of product offerings at the end of two (2) years.)

## Creating a Sustainable Fabric Alliance Program at Kaiser Permanente: A Case Study

3. Warranties
  - A. Provide warranty information pertaining to your fabric lines.
    - a. Provide training materials that document warranty information for end users
  - B. Indicate conditions that would void or limit the warranties that accompany your fabric lines.
  
4. Upholstery Cleaning and Maintenance
  - A. Include **only** upholstery fabrics that can be cleaned by a water extraction process as a part of a normal maintenance program.
    1. Include any testing you have done with Johnson Diversey products.
    2. Include any testing you have done with Ecolab products.
  - B. Include general spot-cleaning procedures.
    1. Include any testing you have done with Johnson Diversey products.
    2. Include any testing you have done with Ecolab products.
  - C. Provide detailed cleaning procedures for a list of expected stains to be encountered in the healthcare setting.
    1. Indicate which cleaners have been tested and/or are recommended.
    2. As stipulated in the Collaborative for High Performance Schools (CHPS) Section of CA 01350 Chronic Recommended Exposure Limit (ChREL) no single product shall contribute VOCs of more than one half ( $\frac{1}{2}$ ) the Office of Environmental Health Hazard Assessment (OEHHA) staff recommended indoor air limit of 33  $\mu\text{g}/\text{m}^3$ .
    3. As stipulated in the Collaborative for High Performance Schools (CHPS) Section of CA 01350 Chronic Recommended Exposure Limit (ChREL), the calculated concentration of formaldehyde shall not exceed 16.5  $\mu\text{g}/\text{m}^3$ .
  
5. Cubicle Curtain Fabric Criteria
  - A. Cubicle curtain fabric cannot be less than 72" wide in length.
  - B. Cubicle curtain fabric shall be *inherently fire retardant*.
  - C. Cubicle curtain fabric must stand up to regular washing at temperatures of 160<sup>0</sup> F for at least twenty-four minutes (CCR T22 Sec 70825 (a)(D)(4)).
  - D. Cubicle offerings will be catalogued in the same manner as described above for Upholstery.
  
6. Drapery Fabric Criteria
  - A. Drapery fabric cannot be less than 54" wide in length.
  - B. Drapery fabric shall be *inherently fire retardant*.
  - C. Drapery fabric must stand up to regular washing at temperatures of 160<sup>0</sup> F for at least twenty-four minutes (CCR T22 Sec 70825 (a)(D)(4)).
  - D. Drapery fabrics will be catalogued in the same manner as described above for Upholstery.