

# **Flame Retardant Alternatives: Green Furniture Partnership**

Initial Stakeholder Meeting Summary  
Grand Rapids, Michigan

December 17, 2003

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## 1. INTRODUCTION

This report is intended to provide meeting participants with a detailed summary of the primary issues discussed during the initial stakeholder meeting held in Grand Rapids Michigan on December 17, 2003. The intended distribution list is limited to attendees. The report does not represent a complete synopsis of all discussions (e.g., meeting minutes). A goal of this summary is to articulate the primary issues, concerns, and questions voiced by various stakeholders; along with any preliminary decisions and conclusions on discussion points (if reached). Another goal is to provide this initial “core stakeholder group” with a list of action items and “next steps” to ensure that the project proceeds in an efficient manner (assigning responsibility to individuals or groups whenever possible).

The document is organized into three sections: this introduction, a summary of the meeting as topics were discussed, and action items. The meeting agenda is also included as Appendix 1 for reference.

### 1.1 Purpose of Meeting

The stated purpose of the meeting was to *define the scope and direction for the proposed Alternative Flame Retardants/Green Furniture Partnership* (final project name to be determined). The initial motivation for the partnership came from a mutual interest in working together to identify an environmentally-friendly way to flame-retard furniture. Specific objectives of this initial meeting included:

- Identify each participants’ motivations, interest, concerns, and ideas for the partnership.
- Identify common themes and interests, and additional information needed.
- Develop an initial action plan for follow-up activities.

### 1.2 Participants and Contact Information

The participants, listed below, included members of the American Furniture Manufacturer’s Association (AFMA); the Business and Institutional Furniture Manufacturer’s Association (BIFMA); the U.S. Environmental Protection Agency (EPA); and ERG (an EPA contractor).

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## **2. MEETING SUMMARY NOTES**

This section presents a detailed summary of the discussions as they occurred throughout the meeting. The intent is to document the initial thoughts, concerns, and issues of all attendees as well as discussion points on these topics and suggested next steps for development of the partnership program.

### **2.1 Introduction**

After all meeting participants were introduced EPA's Design for the Environment (DfE) Branch Chief, Clive Davies, discussed EPA's interest in brominated flame retardants (BFRs). Currently, these focus on a subset of BFRs known as polybrominated diphenyl ethers (PBDEs) and more specifically, pentabromodiphenyl ether (pentaBDE) which is the primary chemical flame retardant used domestically in low-density flexible polyurethane foam.

Clive and the other EPA participants (Leif Magnuson and Kathleen Vokes) presented a PowerPoint Slide show that discussed EPA's current understanding of the risk associated with these chemicals. The presentation also included a discussion regarding EPA's preliminary vision of a voluntary partnership with industry to reduce risk to human health and the environment while simultaneously maintaining the necessary fire-safety aspects of furniture products.

Clive stressed that the intent of this meeting was for all potential stakeholders to express their views, concerns, and issues regarding the identification and use of alternative flame retardant measures. He stated that EPA does not intend to dictate to industry specifically how to develop the project. Rather, EPA hopes that industry will take an active leadership role from the beginning to design and implement a project that will be mutually beneficial to all stakeholders, ultimately resulting in a cost effective plan to develop economically-feasible end products that are environmentally friendly as well as safe from the fire risk standpoint.

### **2.2 EPA's Slide Presentation**

EPA's slide presentation can be summarized as follows.

In general, growing scientific evidence shows that PBDEs in general, including pentaBDE specifically, are persistent in the environment and bioaccumulate throughout the food chain. Research is underway to evaluate the specific human health and ecological toxicity of various PBDEs; however, preliminary studies suggest there may be potential concerns. In light of this information, domestic and foreign environmental agencies and industry leaders have developed regulations and voluntary phase-outs for the three predominant PBDE chemicals (pentaBDE, octaBDE, and decaBDE). Europe has already banned the manufacture of pentaBDE and octaBDE; the state of California recently passed similar legislation that will take effect in 2008. Meanwhile, the only U.S. manufacturer of pentaBDE (Great Lakes Chemical Corporation) has agreed to a voluntary phase-out of pentaBDE and octaBDE by December 31, 2004.

In light of these developments, industry must identify alternative methods to manufacture foam and/or furniture products that meet flammability standards without using pentaBDE, within the next year. EPA recognizes that the use of other chemicals should be thoroughly evaluated from a human health and environmental standpoint before substituting their use for pentaBDE.

The problem posed to the entire supply chain of pentaBDE manufacturers and users (and the goal of this proposed voluntary partnership program) is to quickly identify economically-feasible alternative methods to flame retard furniture that will meet the existing and proposed flame retardant standards. This may be accomplished by identifying chemical alternatives, by developing new manufacturing processes that reduce or eliminate the need for chemical additives, or using alternative furniture designs.

EPA also provided an additional note regarding one potential “drop-in alternative” for pentaBDE that has recently been noted in the press, Firemaster 550. This alternative consists of a mixture of chemicals, and the brominated components of the mixture have been evaluated by EPA. As stated in several news reports and an EPA press release, Firemaster 550 has been approved for production and use. EPA has determined that the brominated portions of the mixture are not persistent in the environment, does not bioaccumulate, and do not pose a risk to the environment from an aquatic toxicity standpoint. However, contrary to some published news reports, EPA has not fully evaluated the human health toxicity associated with Firemaster 550 and has required the manufacturer to conduct a battery of tests and submit the results to EPA for full evaluation. EPA reserves the right to impose restrictions on the manufacture and/or use of Firemaster 550, pending results of these tests.

### **2.3 Discussion Points Related to EPA’s Presentation**

As EPA presented information on various topics, several participants discussed concerns and pointed out issues that the partnership should consider. These discussion points are summarized below.

- Dick Driscoll pointed out that BIFMA in particular (and the furniture industry in general) is “playing catch-up” regarding issues with PBDEs. Many industry leaders have only recently found out there are concerns with pentaBDE. Therefore, an early goal of the partnership should be to educate the “core group” of partners as well as all stakeholders on the general issues and concerns related to pentaBDE and potential alternatives. This includes all aspects that may affect decisions (environmental, economic, manufacturing process limitations, flame retardant regulations, etc.).
- Bill Perdue noted that AFMA wants to ensure the scope of the partnership is not too narrow. AFMA recognizes that proposed Rulemakings may encompass the entire furniture product, not just foam (e.g., the proposed Consumer Products Safety Commission, CPSC, flammability standard). The furniture manufacturers may need to use flame retarded fabric as well as, or in lieu of, flame retarded foam. Therefore, any decisions and initiatives should also consider fabric.

Bill noted that any chemical alternative that is identified must be a drop-in substitute, to ensure economic viability.

It was also noted that the primary method of flame retarding fabrics is to use a back coating that includes decaBDE; however, some fabrics cannot be back coated.

- Dick Driscoll noted that barrier technologies such as interliners have been proposed as an alternative method for flame retarding furniture (opposed to chemically-treating foam). However, due to complex shapes and designs interliners are not easily incorporated into many types of office furniture. Therefore, they may not be viable options for all situations.
- Various participants noted that a primary concern should be to thoroughly investigate environmental issues with potential chemical alternatives before encouraging or even proposing their use (industry does not want to promote use of an alternative now only to find out in the future that its use must also be discontinued due to environmental concerns). Participants suggested considering the “TRIS situation” as a case study, where textile manufacturers en masse switched to the use of this chemical as a better flame retardant for children’s sleep ware; only to find out later that it results in deleterious health effects and could not be used. The industry had to dispose thousands of yards of TRIS-treated fabric, causing a significant financial strain. A similar situation must be avoided when identifying alternatives to pentaBDE.
- Various participants noted some primary points when considering alternatives: any alternative must result in a product that meets proposed flammability standards (e.g., California Technical Bulletin 117 and the CPSC Rule); economic feasibility must be considered; effects on aesthetics of the product (foam and/or fabric) should be assessed; scorching of foam (either causing an aesthetic issue due to discoloration or affecting the physical characteristics of the foam); and toxicity issues were all discussed.

Other points for the partnership to investigate include: consider all flame retardants in the entire piece of furniture (e.g., fabric, batting, webbing, dust covers, plastic), not just in the foam; what is the average life of furniture and how does this correlate to a life cycle assessment of the flame retardant? (BIFMA noted that one study estimates the life of office chairs is 7 years, after which they may be re-upholstered to increase their useful life to 10 years); how will alternative flame retardants affect performance factors related to the furniture product, not just the foam (e.g., durability of foam, “cleanability” of fabric, durability of flame retardant characteristics)?

- David Bell noted that when investigating chemical alternatives for fabrics, consideration must be given to chemicals that can withstand significant heat. Many fabric materials such as cotton and nylon melt at approximately 450 degrees, while open flame tests often generate temperatures of 1,000 degrees.

- Dick Driscoll expressed a desire to include the cigarette industry in evaluations, particularly the concept of developing and marketing non-smoldering cigarettes.
- Bill Perdue noted that the domestic furniture industry is very sensitive to foreign markets. Any suggestions made by the partnership must consider world-wide economic ramifications such that U.S. companies are not put in a competitive disadvantage. Many stakeholders agreed with these statements and stressed that research should be conducted to identify effects of regulations and voluntary actions of foreign trade. It was noted that the current cost of compliance for U.S. furniture manufacturers is already approximately \$8,000 per facility, per year.

EPA proposed to prepare a short document discussing international stakeholders and their interaction with EPA when U.S. environmental regulations are enacted.

- Bill Perdue noted that AFMA includes a wide variety of members; those at the high-end, mid-point, and low-end of cost and furniture quality. AFMA will not support any recommendations made by the partnership that result in a competitive advantage to any one of these industry segments.
- Multiple participants suggested the concept of developing an “expanded MSDS” sheet for alternative chemicals. The purpose of these sheets would be to supply foamers, textile manufacturers, and furniture manufacturers with all relevant environmental concerns for various flame retardant chemicals. The specific information to be included was not discussed, but in general it could include information on environmental issues such as persistence, bioaccumulation potential, aquatic toxicity, human health toxicity; performance characteristics; and general economic information.
- EPA and ERG specifically asked the group whether industry typically manufactures ALL furniture to meet CA TB117, even if its intended sale and use is not in California. All participants agreed that to their knowledge all furniture is manufactured to meet CA TB117, and will be in the future. One primary reason is logistical issues and the associated economies-of-scale related to the preparation and tracking of multiple production lines. A second reason is potential liability (difficulty in tracking responsibility if a piece of “non-CA TB117” furniture were to be sold and used in California).
- EPA and ERG also asked whether furniture manufacturers typically require foamers to supply “virgin white” foam that does not exhibit any “light scorching” or discoloration. Multiple participants confirmed this is a standard requirement. However, they agreed that the reason may be purely aesthetic and that there may be instances when the requirement is not necessary (e.g., if the foam will be covered with dark fabric).

Participants noted that although it may be feasible to remove this requirement when consumers will not be able to see discolored foam, some fabrics are somewhat transparent (e.g., “low-end” furniture as well as “high-end” that includes fine fabrics). Therefore, even slight discoloration may be a realistic concern.

## **2.4 Individual Participant Input**

After completing the discussion of issues related to EPA’s presentation, Jan Connery (ERG’s facilitator) asked each participant to discuss their interest in the potential partnership program. Specifically, participants were asked to voice their concerns and to note issues that may affect their individual facility or company as well as those they feel will affect the industry as a whole. A summary of this input is presented below, noting that many participants simply noted their agreement with topics already discussed.

### Alan Rampey (Glen Raven Custom Fabrics):

Alan commented that although the focus of many discussion points relates to pentaBDE and its use in foam, any decision pertaining to flame retarding a completed furniture article will impact fabric manufacturers. Therefore, this industry and its concerns should also be included in the partnership. Alan raised three specific issues:

- All decisions must be made such that they do not offer a competitive advantage to any company or component of the industry - all stakeholders should, “operate on a level playing field”.
- It is particularly important to consider domestic vs. foreign markets (imports). How will CPSC, EPA, and other government agencies police imported articles to ensure they meet domestic standards and/or voluntary agreements. Similarly, how will domestic articles be policed?
- It is important to ensure that any alternative chemical is environmentally friendly (conduct a thorough risk evaluation for each alternative prior to promoting its use).

### Tom Reardon (BIFMA)

Tom stated his interest is to ensure that BIFMA is informed and provides input regarding flame retardant issues and partnership programs at their onset. He noted three primary concerns:

- The partnership should not vigorously promote any specific alternative design or chemical that will result in an advantage or disadvantage to any market sector. Rather, the group should, “set the bar and let individual companies determine the best way to meet it.” For example, suggesting development of foam-free furniture could be an option, but it should not be vigorously promoted because this would likely result in a reduced market share for some while significantly increasing market share for others.

- Consider developing a tracking and/or enforcement mechanism for domestic and international stakeholders. This will help ensure a level playing field (particularly between the U.S. and foreign markets).
- When selecting case-studies, try to find and showcase multiple examples of how to achieve improved performance. Include case-studies only if there are multiple types. This will ensure that one niche market sector is not promoted more than another.

### Bill Perdue (AFMA)

As director of environmental safety and health/human resources & standards for AFMA, Bill echoed Tom Reardon's comments, stating his interest in the partnership is based on the desire to be informed and provide input on all flame retardant issues that affect the furniture industry as a whole. Bill offered several comments he would like the partnership to consider:

- Ensure that all stakeholders in the entire supply chain are involved. However, it may be beneficial for initial stages of the program to consist of a core group that only includes furniture and textile manufacturers. Foam manufacturers and chemical manufacturers should eventually be included, but not until their potential roles and responsibilities can be defined. Bill noted his concern that these industry sectors may have their own agendas and objectives that could hinder progress of the program.
- Consider including the barrier technology industry sector into the partnership at an early stage.
- Any proposed alternative chemical should be a "drop in substitute".
- The partnership should consider evaluating flame retardant issues throughout the entire supply chain - not just the end product (furniture).
- Each substitute should be fully evaluated from several performance perspectives (e.g., Does it result in furniture that will meet flammability standards AND does it result in a product that is appealing to consumers from all aspects ranging from aesthetics to comfort and durability)?
- Consider enlisting partners to conduct pilot tests for alternatives.
- Fully evaluate the economic ramifications to any suggestions (to the product manufacturer as well as the consumer).
- Conduct risk assessments (or at least relevant specific components of a risk assessment) on all chemical alternatives prior to suggesting their use. This should include an analysis of fate and transport.

- Seriously consider EPA's proposals to issue a Green Design Challenge to furniture manufacturers as well as a Green Chemistry Challenge to chemical manufacturers.
- Fully assess the ramifications of all potential and proposed rulemakings (e.g., How will various options for the CPSC Rule affect the "target" for an alternative?)

#### David Bell (Culp Inc.)

As a representative of fabric manufacturers, David stated that his primary interest is to ensure that this industry sector is fully informed and has the opportunity to participate and provide input to discussions related to flame retarding furniture because decisions will significantly impact textiles. David agreed in principal with comments and suggestions made by others and added the following specific points from his perspective:

- Consider developing a structure for this partnership that can be copied and transferred to similar, future partnerships. For example, remember the issues associated with TRIS and consider how to document "lessons learned".
- Consider that the partnership may not be able to find the "perfect solution" and recognize that an environmental improvement (even if not ideal) may be worth considering.
- Remember that any alternative (chemical or product design) must be consumer-friendly ... even if it is beneficial to the environment, consumers will not purchase the product if it is not appealing.
- Involve the entire supply chain, including textile manufacturers.
- Development of an expanded MSDS should be considered.

#### Phil Hester (Steelcase)

Phil stated that a primary interest is to ensure that Steel Case is informed and, "does not get surprised" by learning of environmental concerns, regulations, or voluntary incentive programs after they have been developed. Steel Case desires to provide input up front to the decision-making process to ensure the partnership considers their interests and expertise. Phil noted three comments pertaining to previous discussions:

- The group should consider focusing on a limited number of issues (one or two), rather than addressing all environmental concerns with furniture.
- Phil supported the concept of developing an "expanded MSDS" that will provide environmental and possibly other information regarding chemical alternatives.

- Phil suggested focusing initial efforts on chemical alternatives rather than completely redesigning foam or furniture.

Randy Ruster (Herman Miller and BIFMA)

Randy reiterated the general comments pertaining to Steel Case's desired involvement. Additionally, Randy commented that the group should consider the following:

- Consider keeping a holistic view of effects on the entire supply chain.
- Ensure that no one sector receives a competitive advantage based on partnership activities.
- Further investigate the fate and transport of pentaBDE.
- Create a common point of communication and/or information transfer for the partnership.

Scott Charon (Herman Miller)

Scott offered the following for consideration from Herman Miller's perspective:

- The group should recognize that drop-in substitutes are preferential.
- A primary consideration is that all substitutes (chemical or design) must be economically feasible.
- Potential advantages that may be created for foreign suppliers (importers) must be considered and avoided.
- The group should consider how potential alternatives will be evaluated from a performance standpoint (e.g., pilot tests and case studies).
- The McDonough Braungart approach to a chemical alternatives analysis may be useful for the group to consider during the development of this project (e.g., using the color coding system as an indicator of environmental friendliness). The group agreed and requested additional information on this approach.

Brad Miller (BIFMA)

Brad's interest rests in his involvement with government affairs for BIFMA. He echoed statements made by other BIFMA participants and added the following additional comments:

- As others have noted, consider a coordinated method for information transfer, possibly a central Internet site.

- An immediate next step should be for this group to determine who should be included in the partnership and when to get each stakeholder group involved. This task includes determining the parameters of the project and then determining appropriate roles for various stakeholder groups (e.g., How will roles differ between foamers, furniture manufacturers, textile manufacturers, etc.?).

Brad's comment on this topic generated considerable discussion about the available resources for this and related projects (both from EPA's perspective and industry's). Some participants voiced concerns that a large, all-encompassing project involving many stakeholders may be less productive than a small, well-defined project. Others noted that the partnership needs to develop an agreed-upon set of specific parameters to investigate, then identify the roles for appropriate stakeholder groups and solicit their involvement (financial, manpower, and facility expectations should all be defined early in the developmental stages).

- VOC and solid waste concerns should also be considered.

#### Dick Driscoll (BIFMA)

Dick added the following specific comments that had not previously been discussed:

- The group needs to discuss and then present a consistent message to the public. Care should be taken to ensure that the message provided does not waiver and is consistent with official EPA views, as well as those of other government agencies.
- Also, significant consideration should be given to media relations. The group should ensure that the public perceives the industry is taking proactive steps and that the industry is not viewed as supplying dangerous or environmentally unsafe products. Dick is concerned that the general public may delay purchasing products until the "perfect alternative" is found if they feel there is an environmental concern. Therefore he suggests NOT involving the public or non-government organizations (NGOs) until the partnership has agreed on a specific strategy on this issue (ALL participants agreed with this point).

## **2.5 Potential Project Ideas - General Discussion**

ERG and EPA summarized their perception of the recurring themes, primary points of concern raised by participants, and potential project ideas that were discussed up to this point. The next phase of the meeting was to open the floor for general discussion regarding these topics, come to a group consensus regarding issues whenever possible, and identify action items and next steps. Discussions pertaining to potential projects are presented below:

### 2.5.1 Chemical Substitutions (identification and evaluation of alternative chemicals)

Goal: This was the primary potential project that was discussed. The goal of the project would be to identify and evaluate several chemicals that can be used as alternatives in final furniture products. In general, the group agreed that this type of project would be beneficial to all stakeholders. A specific project plan was not developed; rather participants discussed various issues to consider when developing the plan. EPA offered to prepare an outline for a proposed project plan as an immediate next step and forward it to this core stakeholder group for discussion during the next group meeting (tentatively set as a conference call in late January).

Various participants suggested several general components to include in the project. After discussing these considerations, the group recognized that the overall scope of such a project must be further refined. Specifically, the consensus was to focus on chemical alternatives affecting both foam (where the primary PBDE currently used is pentaBDE) and fabric (where the primary PBDE currently used is decaBDE); opposed to only addressing foam. Evaluating chemical alternatives for plastics may be considered at a later date. The group generally agreed that the project should include the following components:

- A. An evaluation of alternatives from the following perspectives
  - i. Cost
  - ii. Human Health and Environmental Issues
  - iii. Performance
    - Fire retardant characteristics
    - Aesthetic effects on final product
    - Durability effects on final product
    - Comfort effects
  
- B. Risk Evaluation of each alternative
  - i. This should involve chemical manufacturers such that they can help identify physical and chemical properties that are necessary for a proper evaluation.
  - ii. Develop a list of critical questions that need to be answered for an informed evaluation, in layman's terms (e.g., toxicity, half-life, bioaccumulation potential).
  - iii. Exposure, fate and transport should also be investigated.
  
- C. "Expanded MSDS" data sheets
  
- D. Field testing
  - i. Multiple participants suggested that various stakeholders should be tasked with conducting performance tests on alternatives. It was also noted that the group needs to recognize that multiple industry sectors must be involved to supply samples of the chemical, the intermediate products (foam and fabric), and final

product (furniture). The resources required for these tests may be extensive; therefore, the burden must be clearly identified and shared by all participants in the partnership (various individuals identified testing facilities within their companies and organizations and indicated they may be willing to donate time and effort).

- ii. Another consideration is that the targets for “passing” each test and the test protocol must be clearly defined and the results must be reproducible.

### 2.5.2 Design and Chemistry Challenges

Most participants agreed that issuing separate design and chemistry challenges to develop environmentally friendly furniture and chemical substitutes is worth considering. However, the general consensus was that a more detailed description of how these challenges would be issued, monitored, and implemented is needed. EPA offered to include this information in the proposed project outline.

### 2.5.3 Communications Projects

Participants agreed that various aspects of communication should be developed and included within any proposed project. It may be more appropriate to consider these as components of the overall project, opposed to individual efforts. The two primary communication issues discussed were:

#### A. Central Information Source

Multiple participants suggests developing an Internet site that will serve as a central repository for the partnership program. The group discussed preliminary needs for this idea and EPA committed to developing a conceptual web-site design. Alternatives for the site include an EPA site, a site housed by ERG, or a site prepared and maintained by one of the trade associations.

#### B. Outreach to consumers

The group reiterated the desire to withhold publicizing the potential partnership until additional details (including an outreach strategy) are developed. Ideally, the public should be informed once viable alternatives are identified. Development of a consistent message to the public should be included as part of any outreach effort.

### **3. SUMMARY OF ACTION ITEMS**

#### **3.1 Tasks**

- A. EPA will develop a proposed time line for immediate next steps (including assignment of responsibility).
- B. EPA will develop a short summary report to discuss international considerations (e.g., stakeholders, regulations, trade issues).
- C. EPA will forward a detailed outline for an “Alternatives Report” to the core stakeholder group for review prior to the next scheduled conference call (tentatively scheduled in late January).
- D. EPA will develop a conceptual design for an Internet site for review prior to the next scheduled conference call.
- E. EPA will develop a detailed outline and project scope for the potential partnership program.
- F. EPA will develop an outline for a “futures paper”.
- G. David Bell will discuss the project with the Fabric Coalition.
- H. Scott Charon will provide the group with some background and detail on the McDonough Braungart approach to alternatives analysis.

#### **3.2 Next Meetings**

- A. A follow-up conference call with members of this core stakeholder group will be scheduled in late January.
- B. Flammability Seminar: The seminar is scheduled for the March 9th and a Joint AFMA/BIFMA Industry meeting is scheduled for the March 10th. Both meetings will be held at the Sheraton 4 Seasons located in Greensboro, NC. EPA will attend with the primary purposes being to observe presentations and concerns, and to meet additional stakeholders. EPA does not have a presentation prepared at this time (although one could be developed if the group feels it is appropriate). The core stakeholder group may hold an “invite only” session specifically relating to the Alternative Flame Retardant project after conclusion of the seminar.

- C. Joint Leather and Fabric Industry Manufacturing Committee Meeting: This meeting will be held May 26 at the Renaissance in Charlotte, NC. Specific presentations and discussions pertaining to the Alternative Flame Retardants project will be determined in the coming months.

## APPENDIX 1: MEETING AGENDA

- 8:30 a.m. Introduction (Clive Davies)
- Goals of the meeting
  - Format of the meeting
  - Introductions and any initial notes/comments from industry
- 9:00 a.m. Background (EPA)
- Background on DfE
    - Important elements for DfE partnerships
    - Partnership examples
  - Ideas for a furniture partnership with DfE
    - Safer means of flame retarding furniture
    - Green furniture design
- 9:45 a.m. Industry Perspectives  
*Each industry participant discusses their interest in a potential partnership (10-15 minutes each)*
- What is your organization hoping to achieve from these discussions?
  - What is your assessment of the flame retardancy issue (from your company's perspective and your views of the industry as a whole)?
  - What are your concerns re. flame retardant project? Green Furniture Design project?
  - What opportunities do you see for a project with EPA-AFMA-BIFMA?
- 10:45 a.m. Break
- 11:00 a.m. Industry Perspectives (*cont.*)
- 11:45 a.m. Summary (Facilitator)
- Facilitator will lead a discussion summarizing the morning's topics, concerns raised, and common themes. Facilitator will lead group into selecting ideas to explore.*
- 12:15 p.m. WORKING LUNCH  
Scoping Partnership Ideas (Facilitator)
- Identify the scope and goal of project

- Identify the partnership participants and potential roles
- Discuss potential activities that could meet the goal of the project

2:00 p.m. Next Steps

- Action Plan
- Hold Follow-up Meeting(s)?  
(If yes, then identify goals, participants, topics, format, items to prepare, potential target dates)
- Identify Additional Data Needs?
  - Industry attitudes about and experience with addressing flame retardancy/other environmental issues
  - Data needs for an EPA Alternatives Report
- Formalize partnership?

2:30 p.m. BREAK

2:45 p.m. Continue Next Steps/Action Plan discussion

3:30 p.m. Adjourn