

Product Certification and Life Cycle Inventory Update

Webinar

March 23, 2010



RTP ENVIRONMENTAL ASSOCIATES, INC.®

Agenda

- Overview of SBD and Product Certification
- Evaluating Energy Consumption and Environmental Releases-LCA versus LCI
- Developing the Product Certification Program
- The Hang Tag
- Wrap Up/Questions



Sustainable by Design



Product Certification

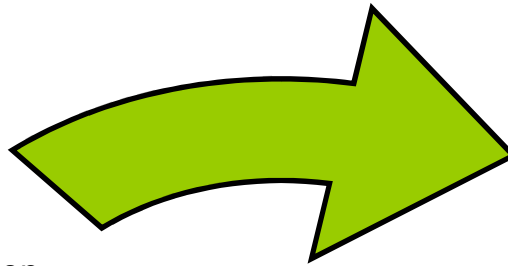
- Provides a label and hangtag that communicates the 'environmental friendliness' of an article
- Requires sustainable business practices that address aspects of the 'biosphere' and 'myosphere'



Product Certification



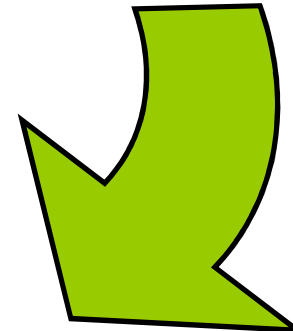
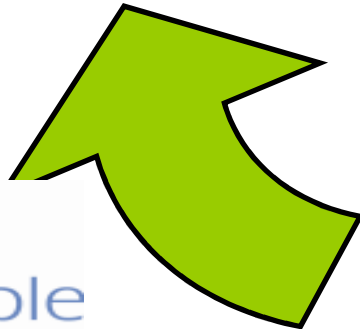
Product Certification



EFEC Registration
Plant Specific



Sustainable by Design
Company or Division Specific



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Product Certification Requirements

- Article is produced @ an EFEC registered facility
- Company/Division is registered Sustainable by Design
- Article complies with the elements of the 'Punch List'
- Can be domestic or off-shore facility



The Punch List

- Article Specific
- Article meets the following environmental, safety and health criteria:
 - Flammability
 - CARB ATCM
 - Applicable CPSC, ASTM and ANSI standards
 - EPA ban on ‘penta/octa-BDE’
 - EPA MACT for low HAP/VOC coatings
 - Lacey Act
 - Life Cycle Inventory
 - Certified Lumber
- Includes Social Performance Criteria



Evaluating Environmental Releases/Impacts – LCA vs LCI

- LCA provides estimate of cumulative environmental impacts
- LCI provides estimate of environmental releases



What is an LCA

- Cradle-to-Grave or Cradle-to-Cradle approach for assessing products
- Technique to assess environmental aspects and impacts of a product by:
 - Compiling inventory of energy and material inputs and environmental releases
 - Evaluating potential impacts
 - Interpreting the results



LCA Process

- Goal Definition and Scoping
- Inventory Analysis
- Impact Assessment
- Interpretation



Goal Definition and Scoping

- Determines time and resources needed
- Six decisions required
 1. Define Goals
 2. Determine type of information needed
 3. Determine required specificity
 4. Determine how data should be organized and results displayed
 5. Define scope of study
 6. Determine Ground Rules for Performing Work



Inventory Analysis

- Life Cycle Inventory
 - Process of quantifying energy and material inputs and environmental releases
- Four Steps of a Life Cycle Inventory
 1. Flow diagram of processes being evaluated
 2. Data collection plan
 3. Collect data
 4. Evaluate and report results



Impact Assessment

- Evaluation of potential human health and environmental impacts
- Key steps in Impact Assessment
 1. Selection of impact categories
 2. Classification
 3. Characterization
 4. Normalization
 5. Grouping
 6. Weighting
 7. Evaluating and reporting results



Interpretation

- ISO defines two objectives of life cycle interpretation
 1. Analyze results, reach conclusions, explain limitations, and report in transparent manner
 2. Provide readily understandable, complete, and consistent presentation of results



Why Was LCI Proposed Instead of LCA

- Provides required information for reasonable costs
 - LCA requires significant resources
 - Interpretation of impacts is difficult and can be controversial



Developing the Product Certification Program

- Similar to EFEC Development
 - reviewed other Product Certification Programs
 - selected features from each that benefit AHFA members

AHFA Sustainable by Design Comparison of AHFA Product Certification and other Product Certifications

Criteria		AHFA	Nordic Swan	BIFMA Level	SFC Silver	SMART
•	Article Specific	Yes	Yes	Yes	No	Yes (product std)
•	Sustainability Program	Yes	No	Yes	No	Yes
•	Governance	Yes	Yes	Yes	Yes	TBD
•	Fees	\$0	~\$2850	Yes (costs)	Based on Sales	TBD
•	EMS	Yes	No	Yes	No	TBD
•	Supply Change Management	Yes	No	Yes	Yes	Yes
•	Global Climate Change	Yes	Yes	Yes	Yes	Yes
•	Social Performance	Yes	No	Yes	Yes	Yes
•	Certified Wood	Yes	Yes	Yes	Yes	TBD
•	Flammability	Yes	Yes	Yes	No	TBD
•	CARB ATCM	Yes	Yes (similar)	Yes	Yes	Yes (similar)
•	Applicable Safety and Durability Standards (CPSC, ASTM, ANSI)	Yes	Yes	Yes	No	Yes
•	EPA ban on penta/octa-BOE	Yes	Yes (similar)	Yes	Yes (similar)	Yes (similar)
•	EPA MACT for Low HAP/VOC Coatings	Yes	Yes (similar)	Yes	Yes (similar)	TBD
•	Lacey Act	Yes	Yes (similar)	Yes	Yes (similar)	TBD
•	Life Cycle Inventory	Yes	Yes	Yes	No	Yes
•	Multiple Certification Levels	No	No	Yes	Yes	Yes

¹BIFMA program addresses four basic elements – 1) materials; 2) energy and atmosphere; 3) human and ecosystem health; and 4) social responsibility



Green Good Housekeeping Seal

- **Product must first earn Good Housekeeping Seal**
- **Categories**
 - Energy Efficiency
 - Water Reduction
 - Ingredient Safety and Product Toxicity
 - Composition of Materials and Ingredients
 - Global Warming
 - Corporate Responsibility
 - Environmental Innovation



Good Guide

GoodGuide 

- **Numerical Ratings**
- **Uses Life Cycle Inventory Data**
- **Categories**
 - **Health and Safety**
 - **Environmental**
 - **Social Performance**



AHFA Product Certification Process

- Similar to Good Guide
 - Points for each category
 - Overall numerical rating
- Applicant will provide supporting information for each category
- BOE will;
 - Review information
 - Assign score for each category
- AHFA will issue Hang Tag / Collect Fees



Product Certification Scoring-Preliminary

Category	Points		
	1	5	10
1) EMS/EFEC-Awards and Recognition	0	1	1+
2) Minimize Environmental Footprint and Energy Impacts			
• Violations of Air Quality Regulations (NOVs)	1+	1	0
• TRI Reporting (Relative to Others)	50+	Top 50	Top 5
• Violations of Water Quality Regulations (NOVs)	1+	1	0
• Renewable Fuels	25%	50%	100%
• Use of Certified Wood	5% to 15%	50%	100%
• Number of Chemical Spills	1+	1	0
• Violations of Hazardous Waste Regulations (NOVs)	1+	1	0
• Low Emitting UF Adhesives			
• ATCM compliant MDF, Particle Board, and Plywood			
• No PBDE in Foams and/or Fabrics			
• No Lead in Leathers			
3) Global Climate Change			
• Carbon Footprint (Rank Relative to Others)-Normalized	50+	Top 50	Top 5
• Global Climate Change Reporting	Annual Report	State	National Registry
4) Social Performance/Corporate Governance			
• Violations of Labor Laws	1+	1	0
• Published Annual Sustainability Report-Transparent, Goals, Results, Issues (Relative to Others)	No Report	Partial	Complete
5) Violations of Applicable CPSC, ASTM, ANSI Standards	1+	1	0

Hang Tag

● 7

Perdue Furniture

Martinsville, VA

Collection: _____

Style No: _____

EFEC No. 12345

Front

●

Explanation of
numerical rating and
SBD Program

Link to AHFA Website

Back



Key Points

- No product testing
- Transparency
- Governance
- AHFA will develop labeling guidelines
- AHFA will distribute hangtags and collect fees
- Schedule – available for October 2010 Market



Key Points (continued)

- Branding the Logo
 - Easily Recognized
 - Captured Market Share
- Sustainability in a Box
 - Point of Purchase Materials
 - Retailer Education
- ‘Got Milk’ – PR Campaign
 - Public Awareness



Wrap up / Questions

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