“Using an EMS to **enHance** the **Environment** and your **Bottom Line**”

**MANUFACTURING SUMMIT**  
Mississippi State, MS  
March 9, 2011

E3 - **enHance**, EFEC & EMS  

.........a way of doing business!

**EFEC**  
Enhancing Furniture’s Environmental Culture
**Objectives**

- **Benefits** of an Environmental Management System (EMS)
- **MDEQ’s enHance Program** & an EMS
- **Resources** for Implementing an EMS

Traditionally, “Environmental Management” has been tied to Regulatory Compliance and is often considered an Additional Cost of Doing Business
Environmental Management

Air Emissions
- Air Operating Permit
- Title V
- State

Solid Waste
- Hazardous Waste Compliance
- Solid Waste Regulations

Water
- Storm Water Permit
- WW Discharge Permit
- Pretreatment
- NPDES

Clean Air Act
RCRA
Clean Water Act

but....

an Environmental Management System (EMS) 
Manages Wastes 
for a Cost-Effective Way Of Doing Business
“A sound and well-conceived EMS is a practical management tool that can help your company to:
1. reduce waste and hence operating costs;
2. gain a competitive advantage;
3. demonstrate compliance with its legal obligations;
4. improve its public image”

IT IS WHAT YOU DESIGN

An EMS can improve an organization’s environmental performance and it’s bottom line but no two organizations are alike and the benefits of an EMS will differ significantly
You Must Fit it To Your Culture

Reasons for Implementing an EMS

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Making operational improvements</td>
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<td>2.</td>
<td>Changing the operational culture</td>
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<td></td>
<td>•EMS is a framework for bringing about change</td>
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<td>3.</td>
<td>Enhancing your ability to meet your regulatory requirements</td>
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<td>4.</td>
<td>Improving relationship with regulatory bodies</td>
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<td>5.</td>
<td>Creating greater employee awareness and commitment to environmental performance</td>
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<td>6.</td>
<td>____________________________</td>
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EPA believes that EMS’s, if implemented properly, can serve as a valuable tool to help organizations:
- improve their environmental performance (reduce impacts)
- increase the use of pollution prevention (reduce costs)
- improve compliance (reduce liability)
BACKGROUND

– MDEQ signed a Memorandum of Agreement with EPA
– A cornerstone of the MOA was an Environmental Management System
– MDEQ launched enHance in July 2008

enHance Objective

“To encourage voluntary environmental stewardship by recognizing committed environmental leaders, thus nurturing the reduction of waste and conservation of resources, resulting in long term economic benefits and continuous environmental enhancement.”
**enHance Membership**

<table>
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<tr>
<th>Levels of Membership</th>
<th>Program Requirements</th>
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<tbody>
<tr>
<td>Associate</td>
<td>Environmental Policy</td>
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<tr>
<td>Steward</td>
<td>Environmental Management Plan or Environmental Management System</td>
</tr>
<tr>
<td>Leader</td>
<td>Projects Resulting in Improvements to the Environment</td>
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</table>

**Evolution of Environmental Management**

- **Denial**
- **Tolerance**
- **Acceptance & Compliance**
- **P2/Pursuit of Excellence**
- **EMS/ Functional Integration**
- **Sustainability**

Adapted from ALCOA Presentation, “Our Story,” Pentagon, March 2001
The TRIPLE BOTTOM LINE is an Emerging Standard for Public and Nonprofit Accounting that considers Three Larger Factors:

- People
- Planet
- Profit

What is Green or Sustainable?

Way of doing business

......... operate in ways that solve rather than cause environmental and social problems.

Adopt principles, policies, and practices that improve the quality of life for their employees, businesses, citizens, industries, and the environment.
CONTINUOUS IMPROVEMENT MODEL

ENVIRONMENTAL MANAGEMENT SYSTEM REQUIREMENTS

- Environmental Policy
- Planning
  - Aspects, Legal and other Requirements, Objectives, Targets
- Implementation and Operation
  - Roles, Responsibility and Authority
  - Competence, Training & Awareness
  - Communication, Documentation, Operational Control of Documents
- Checking
  - Monitoring and Measuring
  - Evaluation of compliance
  - Corrective & Preventive Action
  - Control of Records
  - Internal Audit
- Management Review
## Environmental Management System

### Aspects & Impacts

<table>
<thead>
<tr>
<th>Activity</th>
<th>Aspect (Cause)</th>
<th>Impact (Effect)</th>
<th>Objective</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Operations</td>
<td>Resource consumption-Energy</td>
<td>Air Emissions Depletion of natural resources</td>
<td>Reduce energy consumption</td>
<td>By department: Reduce usage by 10% from previous year</td>
</tr>
<tr>
<td></td>
<td>Resource consumption-Paper Usage</td>
<td>Solid Waste Deforestation</td>
<td>Decrease solid waste generated and reduce natural resource consumption</td>
<td>Make double-sided copies Order paper with 10% recycled content</td>
</tr>
</tbody>
</table>

**EMS RESOURCES**

www.deq.state.ms.us/enhance
enHance Leaders – Implemented EMS

- Baxter International, Cleveland
- EKA Chemicals, Columbus
- Haworth, Bruce
- Hunter Douglas, Tupelo
- International Paper, Redwood
- Nucor Steel, Flowood
- Caterpillar, Oxford
- Naval Construction Battalion Center, Gulfport
- Southern Natural Gas, Pickens
- Cooper Tire, Tupelo
- Columbus Air Force Base, Columbus
- Custom Engineered Wheels, Tupelo
- Flexsteel, Starkville
- Nissan, Canton
- Southern Natural Gas, Onward

ANNUAL WORKSHOP
APRIL 5, 2011
Jackson, MS
EFEC (Enhancing Furniture’s Environmental Culture)

EFEC is a voluntary environmental management system created by AHFA in 1999 to help its members develop and maintain strong, proactive environmental programs. EFEC provides a systematic approach for reviewing and improving your company’s operations for better environmental performance and improved profitability. In addition, many states now offer specific benefits for companies with an environmental management system in place. These benefits may include less reporting, fewer inspections, permit flexibility, faster permit approvals, government recognition and reduced permit and application fees.

EFEC registration requires a company to analyze the environmental impact of its operations, raw materials and finished products on a facility-by-facility basis. Measurable benefits include:

- Better management of resources and raw materials;
- Reduced energy and water consumption;
- Reduced waste disposal and associated costs; and
- Improved overall operational performance and efficiency.

All of a company’s domestic facilities, including headquarters buildings and warehouses in addition to factories, must be EFEC-registered to proceed with AHFA’s Sustainable by Design program.

For more information on beginning the EFEC program, contact Bill Pardue, OpenBlue@ahfa.us.

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