

# **Making EH&S a Priority:**

The Case for EH&S Compliance across Industries and Throughout the Supply Chain

**ACHMM National Conference, September 8, 2008**

**Prabhu Natarajan**

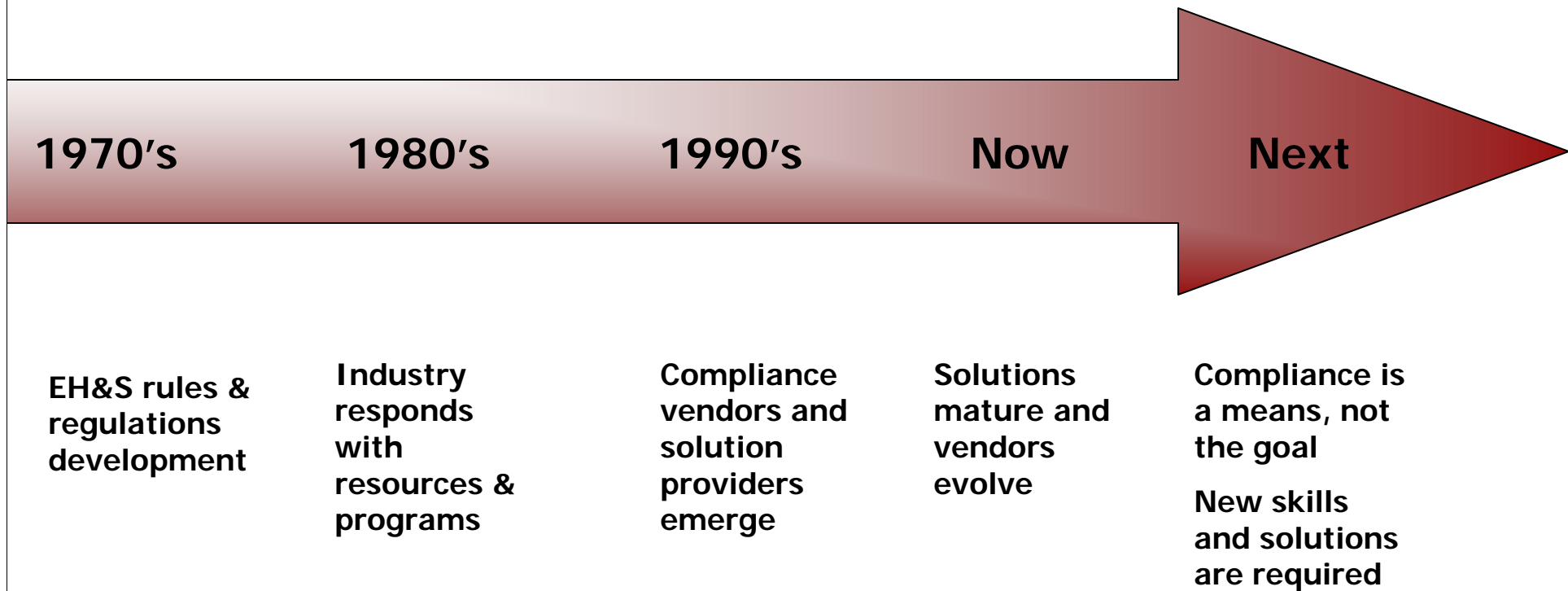
Director, Strategy & Development

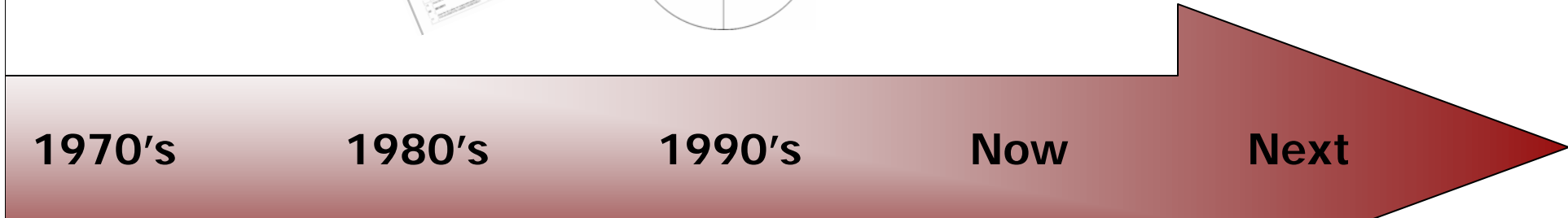
- Leading provider of EH&S compliance and risk information management solutions
- Most comprehensive global EH&S domain knowledgebase
  - Professional EH&S expertise
  - Rich content across multiple databases
  - Unique EH&S business rules and best practices
- Provider of Choice offering:
  - Broadest range of services
  - Delivered in multiple formats and platforms
  - That meet the unique needs of our diverse customer base of more than 700 customers across 7,000 global locations
  - 24 - 7 - 365
  - Global capabilities and presence

- Currently responsible for strategy and corporate development
- More than a decade of experience in global EHS management
  - Managed EHS for both Fortune 500 and small/medium companies; including supply chain companies
  - Experience with implementing EHS policies, procedures and processes around the world
  - Broad exposure to EHS issues across industries and experience with both user and service provider perspectives
- Recently, Chairman of the Board of the Dangerous Goods Advisory Council in Washington, DC
  - promote global harmonization in DG regulations
  - engage stakeholders across the supply chain
  - deliver knowledge & expertise to DG professionals

Times they are a  
changing!

- Evolution of EH&S Management
- Anticipated impact
- Framework for discussion
- Lifecycle approach (also supply chain impact)
- Application examples





**1970's**

**1980's**

**1990's**

**Now**

**Next**

Eh&S  
management

**Task based  
approach**  
  
**Check-list  
dependent**

**Corporate  
vision/mission**  
  
**Policies &  
procedures**  
  
**Program  
management  
– plan, do,  
check, act**

**Measure,  
Report**

**Performance!  
Performance!  
Performance!**



acc » responsible care

## Responsible Care®

Since 1988, members of the American Chemistry Council (ACC) have significantly improved their environmental, health, safety and security performance through the Responsible Care initiative. Participation in Responsible Care is mandatory for ACC member companies, all of which have made CEO-level commitments to uphold these program elements:

- Measuring and publicly reporting performance
- Implementing the Responsible Care Security Code;
- Applying the modern Responsible Care management system to achieve and verify results; and
- Obtaining independent certification that a management system is in place and functions according to professional standards.

Responsible Care is also a global initiative that is practiced currently in 53 countries, which share a common commitment to advancing the safe and secure management of chemical products and processes. Specific Responsible Care practices may vary from country to country as they are determined by each country's laws and national industry association.

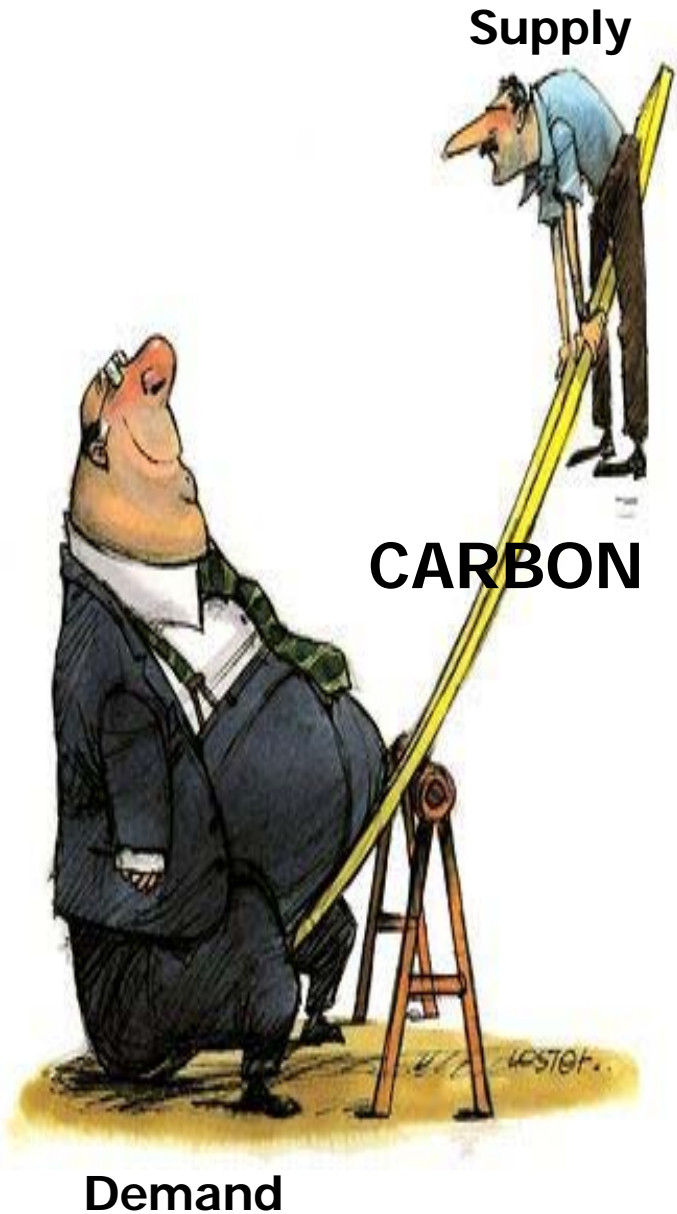
### program elements

- » Responsible Care® Toolkit
- » Metrics Reporting
- » Performance Through Responsible Care
- » Security Code
- » Management Systems and Certification
- » Partnership Program
- » Friends of Responsible Care
- » Publications

### ask a question

Have a question about Responsible Care?

» let us know



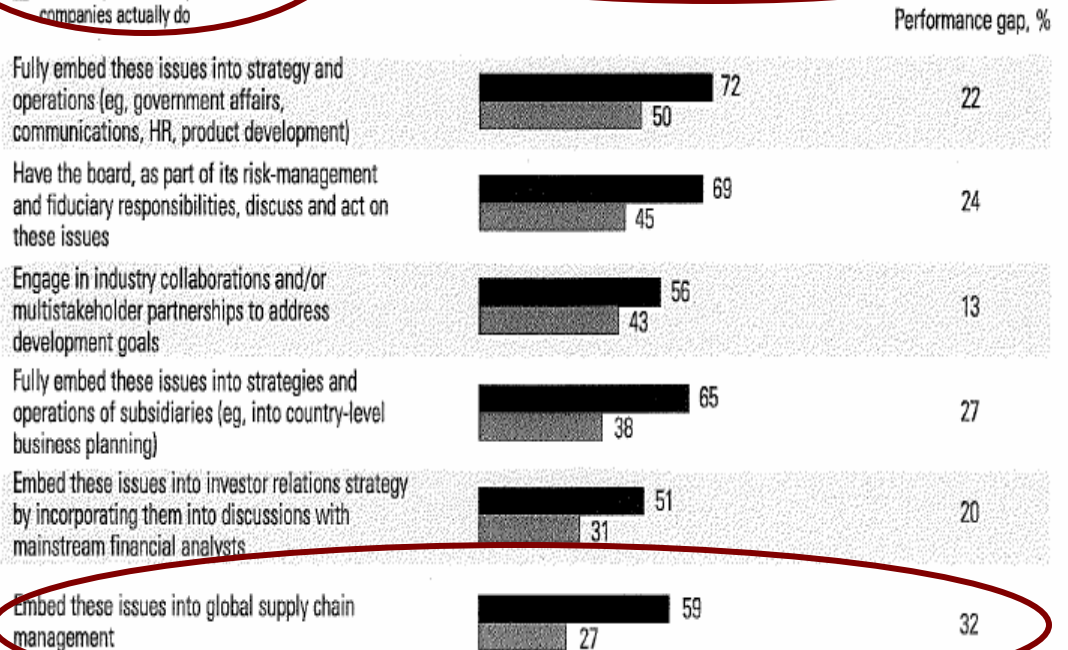
- Sustainability
- Corporate Social Responsibility
  - Value Chain
- Triple bottom-line
- Global Reporting Initiative

- **EH&S compliance is a critical BUT very basic building block for new paradigms**
- **More regulations may become performance oriented**
- **Industry standards may evolve for EH&S performance reporting**
- **Companies may need to understand and anticipate impact from its suppliers and impact to its customers**

% of respondents who agree completely

- What respondents say their companies should do
- ▒ What respondents say their companies actually do

*Which of the following activities should your company implement to address environmental, social, and governance issues as part of its core business strategy?*

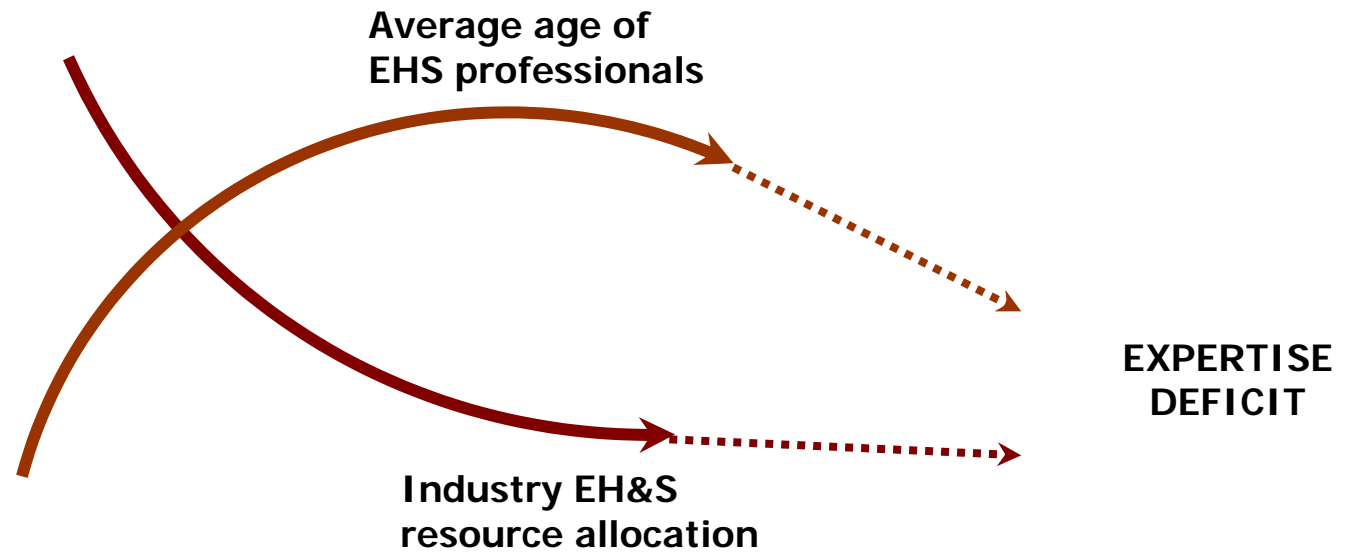
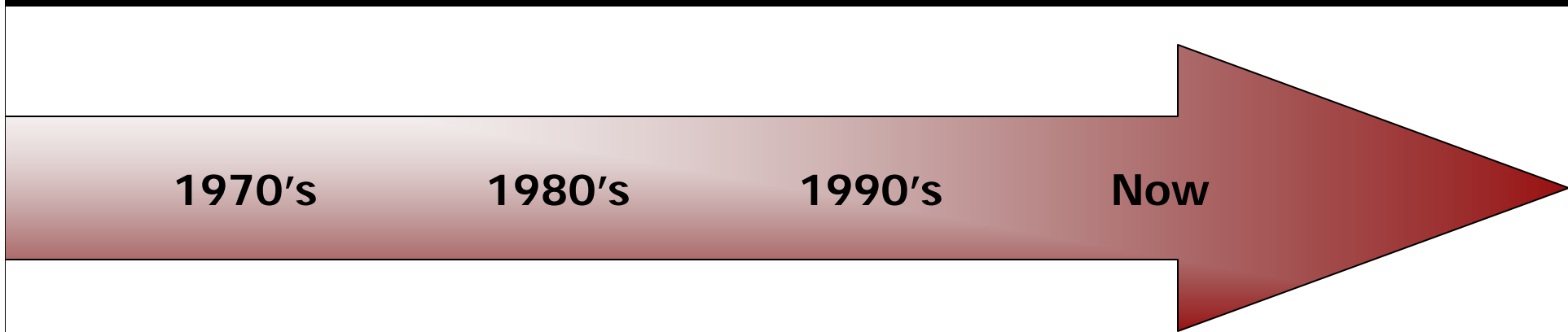


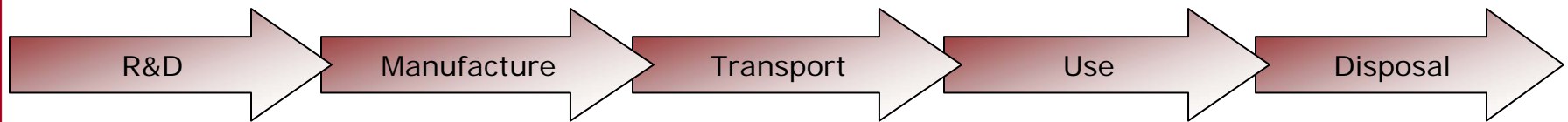
Source: Feb 2007 McKinsey survey of 391 CEOs whose companies participate in UN Global Compact

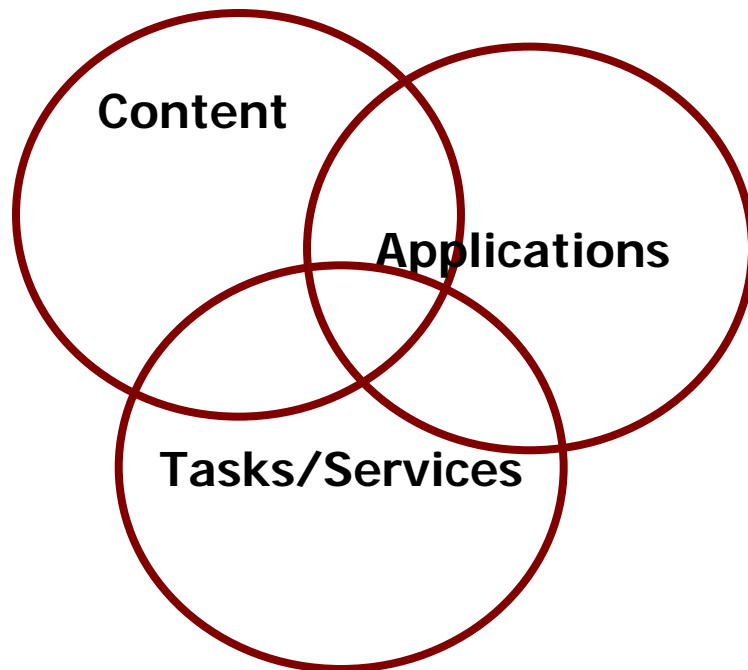
- Every business is both a supplier and a customer -



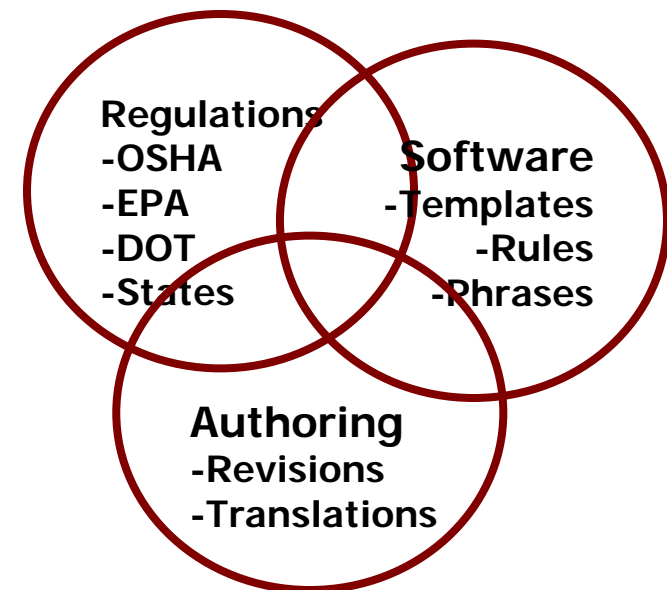
# The Challenge

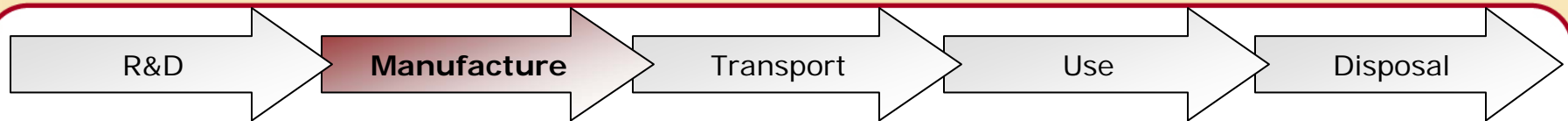




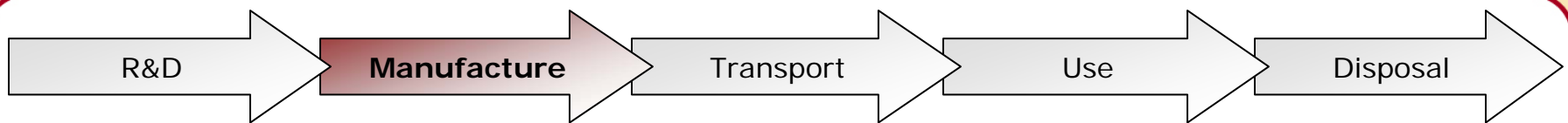


### Example: MSDS Authoring





- Content
  - Global regulations
  - On-site inventory data
- Applications/Tools
  - Regulatory databases
  - Formulation management or other IP systems
  - SDS authoring, distribution, management
  - Inventory management, and regulatory reporting
  - Waste management
  - Injury/illness reporting
  - Industrial/occupational hygiene
  - Air/water emissions
- Tasks/Services
  - Regulatory change tracking & impact analysis
  - Tracking & management (e.g., inventory, waste, injuries, emissions)
  - SDS authoring
  - Classification to meet local requirements (e.g., fire code classification)



- Easy to find regulatory text
  - challenge to translate in to actionable regulatory data
  - using data to aid business decision-making
  - proactive response to changes in regulations
- Complex array of EHS issues
  - People: injury/illness, industrial/occupational hygiene
  - Process: emissions, transport, emergency response
  - Product: understanding and monitoring impact on environment and users
- Global supply chains
  - Vendors and consumers may have different compliance priorities
  - Control points to manage compliance



3E Company Demo - Platinum Edition

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- Home
- (M)SDS
- Product Catalog
- Inventory**
- Chemical Analysis
- Regulatory
- RegImpact
- Admin
- Help

Inventory > Chemical Approval

- Select Location (optional)
- Enter search criteria to find a product, or select show all to display all inventory items under chemical approval.

(No location selected)

Browse Search Clear

My locations

- Eastern Region
- Europe
- Northeast Region
- Western Region

Filter by custom list:

OSHA Z Tables

Search for

Chemical Approval State equals Denied

Search Show All Customize this search

Approve Deny Request more info

Items per Page: 100

Action		Product	Manufacturer	Part #	Location	Requested
Action	<input type="checkbox"/>	1025 1038 Black Dry Ink	Xerox Corporation	A-0042	Seattle, WA (...)	Jan 04, 2007
Action	<input type="checkbox"/>	Acrylic Alkyd Paint	Sherwin-Williams	35-32668 Bro...	Seattle, WA (...)	Jan 29, 2007
Action	<input type="checkbox"/>	Acrylic Alkyd Silver Metallic	Sherwin-Williams	BR-49649	Seattle, WA (...)	Jan 16, 2007
Action	<input type="checkbox"/>	Acrylyd Enamel Satin Gray	Sherwin-Williams	35-32669	Seattle, WA (...)	Mar 09, 2007
Action	<input type="checkbox"/>	Battery	Delco	UN2794	Seattle, WA (...)	Sep 07, 2007
Action	<input type="checkbox"/>	Centari Acrylic Enamel Overall Gloss Har...	Dupont	793S	Seattle, WA (...)	Jan 23, 2008
Action	<input type="checkbox"/>	Clutch friction facings	Wellman friction produ...	2388	Seattle, WA (...)	Jan 30, 2008

Page 1 of 1 (7 items)

Chemical Approval Legend

- **Approved:** This item has been approved by the Chemical Approval Manager.
- **Denied:** This item has been denied by the Chemical Approval Manager.
- **Needs more Information:** Chemical Approval Manager needs additional information from the Requestor.
- **Ready for Approval:** Requestor has responded to the Chemical Approval Manager and the product is ready for review.
- **In Process by 3E:** 3E has not yet received an MSDS from the Manufacturer, 3E needs additional information from the Client to match an MSDS, or 3E has not completed specific data points for the Chemical Approval Manager to complete the review, such as Fire Code Classification.

1 Select Location (optional) 2 Enter search criteria to find a product, or select show all to display all inventory items under chemical approval.

- (No location selected)
- Browse Search Clear
- My locations
    - Eastern Region
    - Europe
    - Northeast Region
    - Western Region

Filter by custom list:  
 Prop 65  
 Search for  
 Chemical Approval State equals Approved  
 Search Show All Customize this search

Approve Deny Request more info Items per Page: 100

Action		Product	Manufacturer	Part #	Location	Requested
Action	<input type="checkbox"/>	1,3-Butadiene	Sigma-Aldrich	295035	Seattle, WA...	
Action	<input type="checkbox"/>	1025/1038/2510 Black Toner	Xerox Corporation	6R122	Seattle, WA...	Nov 21, 2006
Action	<input type="checkbox"/>	410-CC-011 RESIN SOLUTION	PHD Sun Chemical Ink	250-231 AKZ...	Seattle, WA...	Dec 13, 2006
Action	<input type="checkbox"/>	5080 Developer	Xerox Corporation	5R179	Seattle, WA...	Nov 17, 2006
Action	<input type="checkbox"/>	Acetic Acid, Glacial, GR	EM Industries	AX0079	Seattle, WA...	
Action	<input type="checkbox"/>	Acrylic Alkyd UPS Brown	Sherwin-Williams	BR-32668	Seattle, WA...	Jan 16, 2007
Action	<input type="checkbox"/>	Acrylic Lacquer Thinner	Dupont	3608S	Seattle, WA...	Jan 16, 2007
Action	<input type="checkbox"/>	Acrylyd Silver Paint	Sherwin-Williams	35-49649	Seattle, WA...	Feb 09, 2007
Action	<input type="checkbox"/>	AERO	Versachem	27388	Seattle, WA...	Mar 09, 2007
Action	<input type="checkbox"/>	Anti-Size Lubricant	Permatex	80078	Seattle, WA...	Apr 16, 2007
Action	<input type="checkbox"/>	Aqua EZ Filter Cleaner	Associated Leisure Produ...		Seattle, WA...	Sep 18, 2007
Action	<input type="checkbox"/>	ATF Dextron 3 Mercon	Valvoline	v v 353	Seattle, WA...	Aug 26, 2007
Action	<input type="checkbox"/>	Black Developer	Xerox Corporation	5614	Seattle, WA...	
Action	<input type="checkbox"/>	Black Dry Ink/Toner (Replenisher) 5614/...	Xerox Corporation	8R7652	Seattle, WA...	
Action	<input type="checkbox"/>	Black Hi-Temp RTV Silicone Gasket Ma...	OCI USA Inc.	BRT/85/TC/12	Seattle, WA...	Sep 07, 2007
Action	<input type="checkbox"/>	Black Paint	Sherwin-Williams	BR-42086	Seattle, WA...	Apr 12, 2007
Action	<input type="checkbox"/>	Blazer	The Blazer Corp.	RF300	Seattle, WA...	Nov 20, 2007
Action	<input type="checkbox"/>	Brake Fluid	Valvoline	057	Seattle, WA...	Jun 26, 2007
Action	<input type="checkbox"/>	Brake Pads (Friction brake facing)	AlliedSignal	MKN450	Seattle, WA...	Jul 24, 2007
Action	<input type="checkbox"/>	Brake Shoes (Friction Brake Facing)	Honeywell	RAF358	Seattle, WA...	Jun 29, 2007
Action	<input type="checkbox"/>	Brown Paint	Sherwin-Williams	BR-32668	Seattle, WA...	Jun 14, 2007
Action	<input type="checkbox"/>	Centari Acrylic Enamel	DuPont	99A	Seattle, WA...	Aug 26, 2007
Action	<input type="checkbox"/>	CENTARI Acrylic Enamel, 99A, Brushab...	DuPont	ER1319	Seattle, WA...	Jan 28, 2008
Action	<input type="checkbox"/>	Chlordane	Supelco Inc.	Cat#: 48984	Seattle, WA...	Jan 30, 2008

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- Help

RegImpact > Regulatory Impact Analysis

**1** Select Location (optional)

**2** Please select query and date range to search for changes and then select Analyze

#### Automotive

- Browse Search Clear
- My locations
    - Eastern Region
      - Atlanta, GA (61)
        - Automotive**
        - Garden
        - Health & Beauty
        - Pool & Spa
      - Boston, MA (47)
      - Miami, FL
      - New York City, NY
      - Trenton, NJ (53)
    - Europe
    - Northeast Region
    - Western Region

From: **August 2007** To: **August 2008**

- MyWebInsight saved queries
  - Private
    - EPA
    - Food & Drug Query
    - Food Contact Query
    - Prop 65
    - Prop 65 & EU 71-3
    - REACH
    - RoHS
    - SARA List
    - Transportation
    - Western European Exposure Limits
    - Western Region Query
  - Shared
    - Ajax Mfg NA
    - CAN
    - Canada WHMIS
    - Chander



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RegImpact > Regulatory Impact Analysis > Results

8/2007-8/2008 (SARA List) - Automotive

Items per page: 50

Product Name	ACUTE	EP312	TOXIC
<a href="#">1,3-Butadiene</a>			<a href="#">09/2007</a>
<a href="#">410-CC-011 RESIN SOLUTION</a>			<a href="#">09/2007</a>
<a href="#">Acrylic Alkyd UPS Brown</a>			<a href="#">10/2007</a>
<a href="#">Acrylyd Silver Paint</a>			<a href="#">10/2007</a>
<a href="#">Anti-Size Lubricant</a>			<a href="#">09/2007</a>
<a href="#">Brown Paint</a>			<a href="#">10/2007</a>
<a href="#">CENTARI Acrylic Enamel, 99A, Brushable.</a>			<a href="#">10/2007</a>
<a href="#">Corry's Slug &amp; Snail</a>			<a href="#">09/2007</a>
<a href="#">Linseed Oil</a>			<a href="#">10/2007</a>



Navigation controls: back, forward, search, and a progress bar.

(9 items)



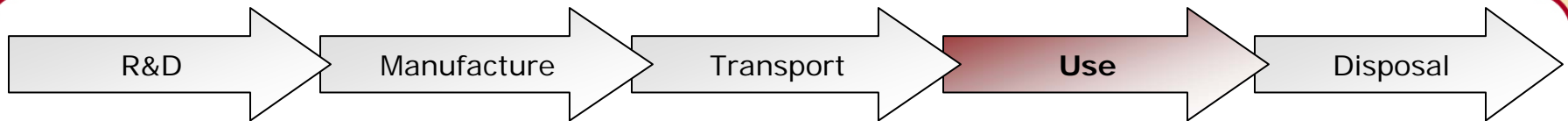
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- Content
  - Global regulations
  - On-site inventory data
- Applications/Tools
  - SDS management
  - Inventory management, and regulatory reporting
  - Waste management
  - Injury/illness reporting
- Tasks/Services
  - Regulatory change tracking & impact analysis
  - Tracking & management (e.g., inventory, waste, injuries, emissions)
  - Classification to meet local requirements (e.g., fire code classification)



- Understanding impact of regulations on the business
  - regulations at CAS number level; business managed at product level
- Can be affected by business locations in 100's of jurisdictions
- High turnover rate of employees
  - Training can be inefficient
  - Employee skill level



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- RegImpact**
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RegImpact > Regulatory Analysis Matrix > Regulation Analysis

SARA List - Automotive

Items per page: 50

Product Name	ACUTE	EP312	TOXIC
<a href="#">1,3-Butadiene</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">Acetic Acid, Glacial, GR</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">Corry's Slug &amp; Snail</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">Linseed Oil</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">5080 Developer</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">Wd-40</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">Mobil Heavy Duty 30</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">1025/1038/2510 Black Toner</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">Buckeye Shopmaster</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">Windex Blue</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">Black Developer</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<a href="#">WD-40</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">410-CC-011 RESIN SOLUTION</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">5280 N/C SOLUTION</a>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
<a href="#">Blazer</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Navigation controls: Previous, Next, Search, and a progress bar. (20 items)

Please note that this information is based on the CAS information provided on the MSDS. If the CAS RN is not listed on the MSDS the chemical will not appear in the results.

- All CAS RN listed on the MSDS are on the list.
- Some of the CAS RN listed on the MSDS are on the list.
- No CAS RN listed on the MSDS are on the list.



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RegImpact > Regulatory Impact Analysis > Results

8/2007-8/2008 (SARA List) - Automotive Items per page: 50

Product Name	ACUTE	EP312	TOXIC
<a href="#">1,3-Butadiene</a>			09/2007
<a href="#">410-CC-011 RESIN SOLUTION</a>			09/2007
<a href="#">Acrylic Alkyd UPS Brown</a>			10/2007
<a href="#">Acrylyd Silver Paint</a>			10/2007
<a href="#">Anti-Size Lubricant</a>			
<a href="#">Brown Paint</a>			
<a href="#">CENTARI Acrylic Enamel, 99A, Brushable</a>			
<a href="#">Corry's Slug &amp; Snail</a>			
<a href="#">Linseed Oil</a>			

**Acrylyd Silver Paint**

- 95-63-6 September, 2007
- 100-41-4 September, 2007
- 136-52-7 October, 2007
- 1330-20-7 September, 2007



(9 items)



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CAS RN: **136-52-7** regulated as a member of the Generics group for CAS RN: S~CO~C

Generics group name: COBALT COMPOUNDS

De Minimis Concentration for Section 313 is:

Old Value: 0.1 %.

New Value:

Reporting threshold for manufacturing and processing: 25000 lbs

Reporting threshold for other uses: 10000 lbs

Chemical Category Code: N096

Note(s): [sr50](#), [sr75](#)

Added in 10/2007

CAS RN: **136-52-7** regulated as a member of the Generics group for CAS RN: S~CO~I

Generics group name: COBALT COMPOUNDS, INORGANIC

De Minimis Concentration for Section 313 is: 0.1 %.

Reporting threshold for manufacturing and processing: 25000 lbs

Reporting threshold for other uses: 10000 lbs

Chemical Category Code: N096

Note(s): [sr50](#), [sr75](#)

Added in 10/2007

CAS RN: **136-52-7** regulated as a member of the Generics group for CAS RN: S~CO~O

Generics group name: COBALT COMPOUNDS, ORGANIC

De Minimis Concentration for Section 313 is: 1.0 %.

Reporting threshold for manufacturing and processing: 25000 lbs

Reporting threshold for other uses: 10000 lbs

Chemical Category Code: N096

Note(s): [sr50](#), [sr75](#)

**Notes**

**sr50** 40 CFR 372.65(c). (Chemical Category Code N096) Includes any unique chemical substance that contains cobalt as part of that chemical's infrastructure.

- Measuring and demonstrating performance is going to drive EHS activities
  - Catalysts include voluntary industry initiatives and government regulations
- Job descriptions of EHS professionals will evolve to support performance driven approach
- Take a lifecycle approach to improve EHS performance
  - Look for regulatory content to enable decision making; not just regulatory text
  - Look to applications/tools that enable workflow; tasks
- Anticipate the EHS expertise deficit
  - Focus on strategic, value added tasks/activities
  - Outsource routine tasks
- Look across the supply chain – both vendors and customers - to improve your EHS performance