



**Strengthening Product Stewardship throughout
the Supply Chain:
A Full Chemical Life Cycle Approach to EH&S
information management**

Agenda

- Essential Building Blocks of EHS Information Management
- EHS Information & The Supply Chain
- Supply Chain Approach to EHS Data Management
- Utilizing this approach for managing elements of your ChemStewards Performance Metrics

EHS Information Management

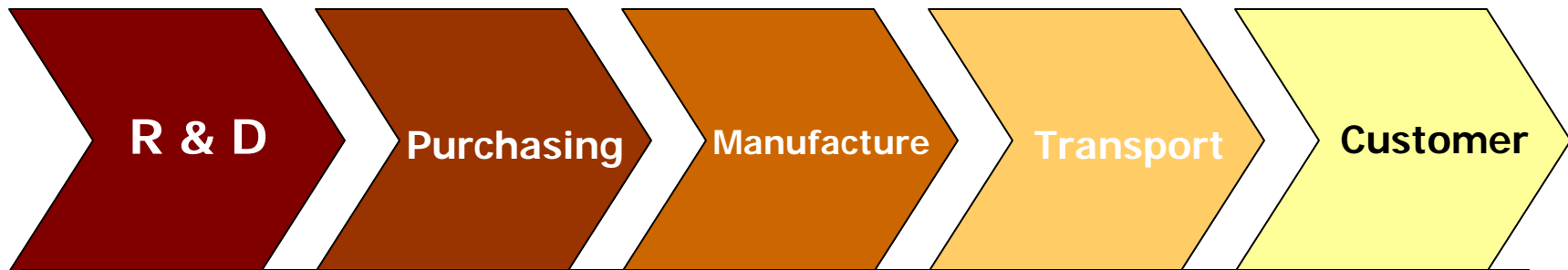
- The Foundation of EHS Data
 - Regulatory, Transportation & Scientific Data
 - Substance/Raw Material Information
 - Inventory of Hazards Materials

- Core Component: Regulatory Data
 - Regulatory, Transportation & Scientific Data
 - Global Regulatory lists (TSCA)
 - Transportation Regulations (DOT, ADR, IATA, IMDG)
 - Scientific Data
 - Methods for Managing Regulatory Data:
 - Purchase from content provider
 - Manage internally

- Keys to effective Regulatory, Transportation & Scientific Data Management
 - Must be updated regularly
 - Must be able to identify non-CAS RN regulated chemicals. (i.e. Compounds)
 - Need system to run queries and reports against this information by individual CAS RN or Raw Material (Multiple Substances)



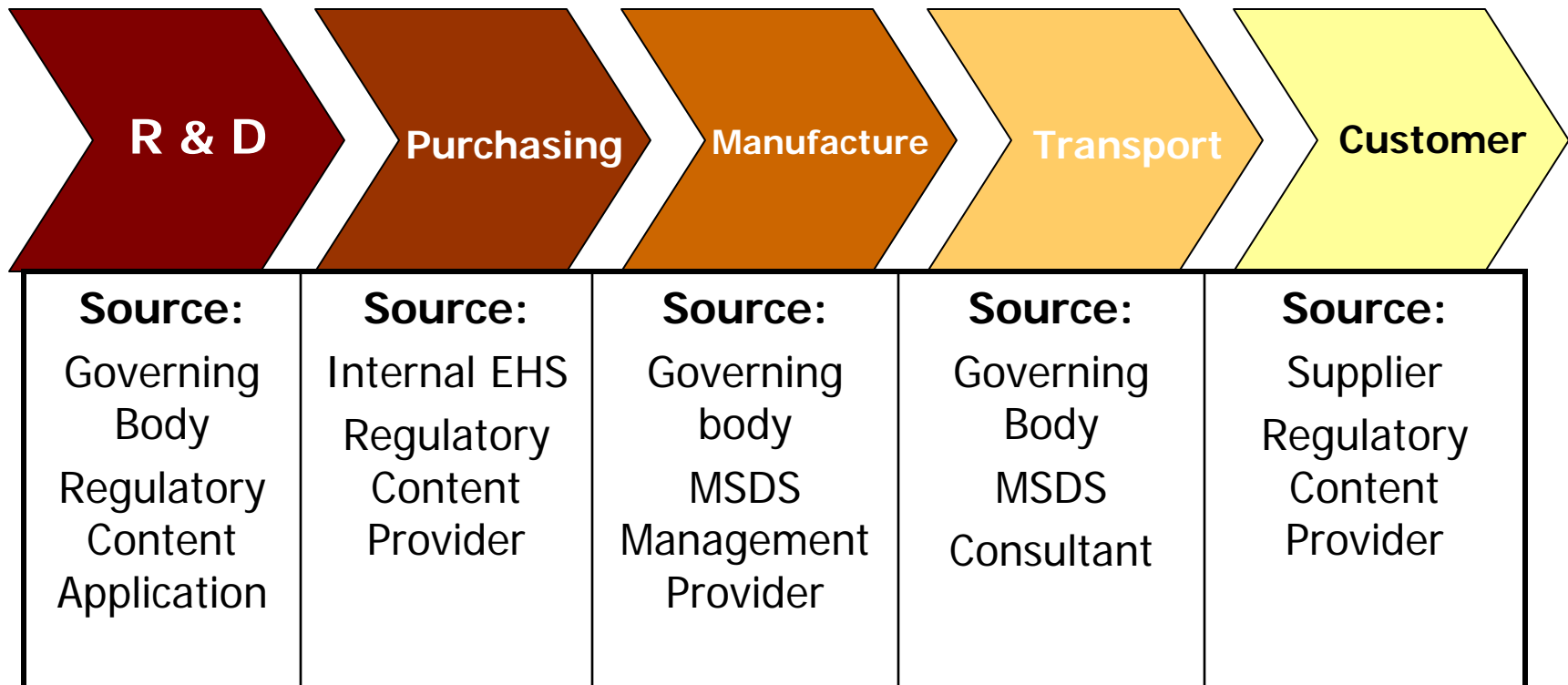
Regulatory Data & Supply Chain



Research regulatory, scientific data on potential substances for final product	Evaluate import/export regulations, particularly Hazardous Substance	Determine Regulatory Reporting Requirements (SARA, REACH)	Identify proper shipping data for shipping papers & labeling	Determine regulatory profile for purchased product (Prop 65)
Compile all product information to author MSDS for the finished good	Analyze product information against lists as specified by corporate			Understand Regulatory Impact for trade secret information



Regulatory Data & Supply Chain



Multiple parts of the supply chain sourcing similar information = \$\$\$\$



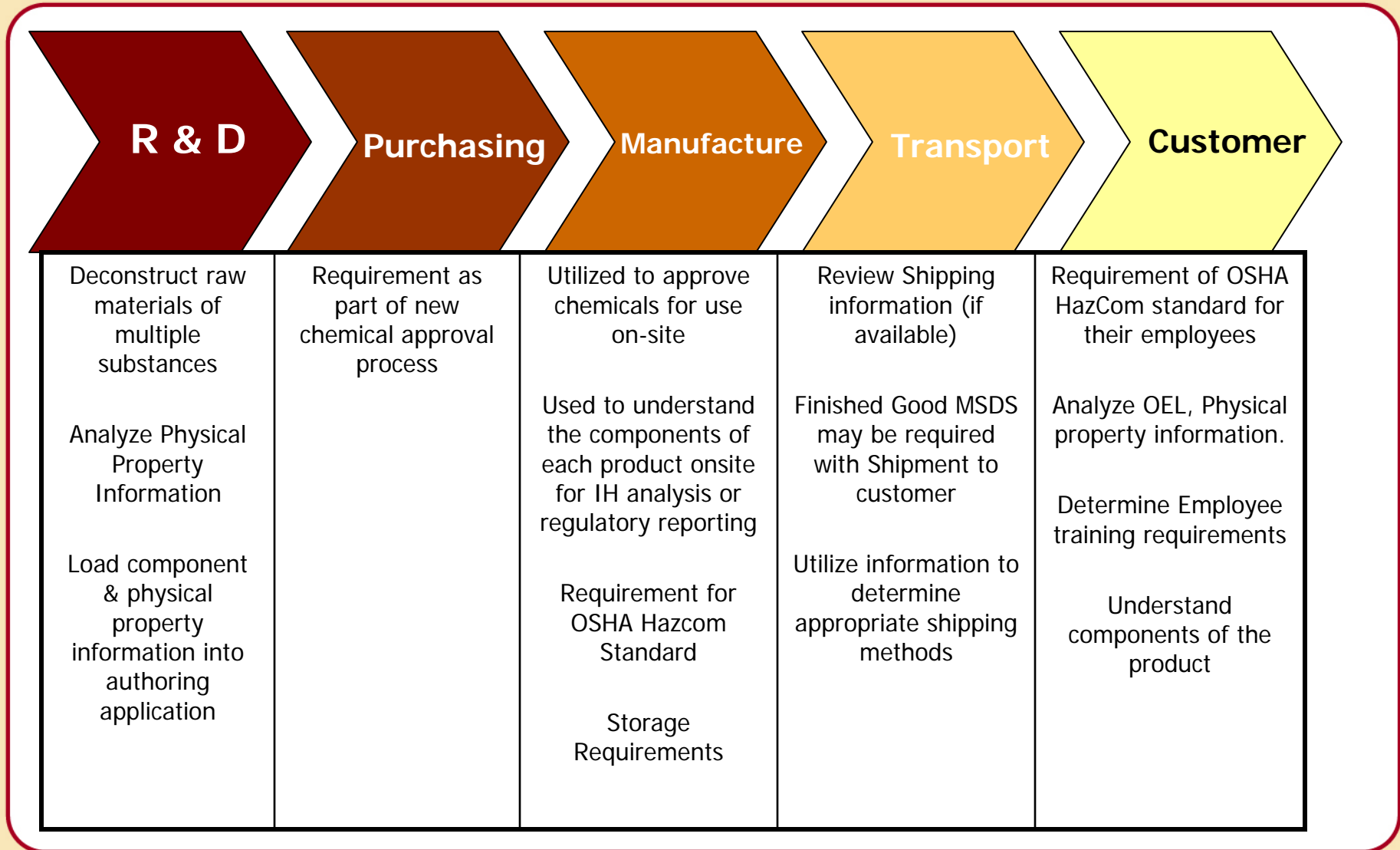
- Core Component: Raw Material Information
 - Accurate information about each raw material product
 - Chemical Constituent(s)
 - Product Classification (NFPA, HMIS, EU, WHMIS)
 - Physical Properties: VOC, PPE, etc
 - Methods for Raw Material Data Collection:
 - Begin with MSDS Information
 - Request additional/incomplete information from manufacturer
 - Full Composition
 - Trade Secret ingredients



- Keys to accurate Raw Material Information
 - Work with manufacturer to obtain additional information
 - Must have a place to store the additional information
 - Must be able to distinguish the source of this information.

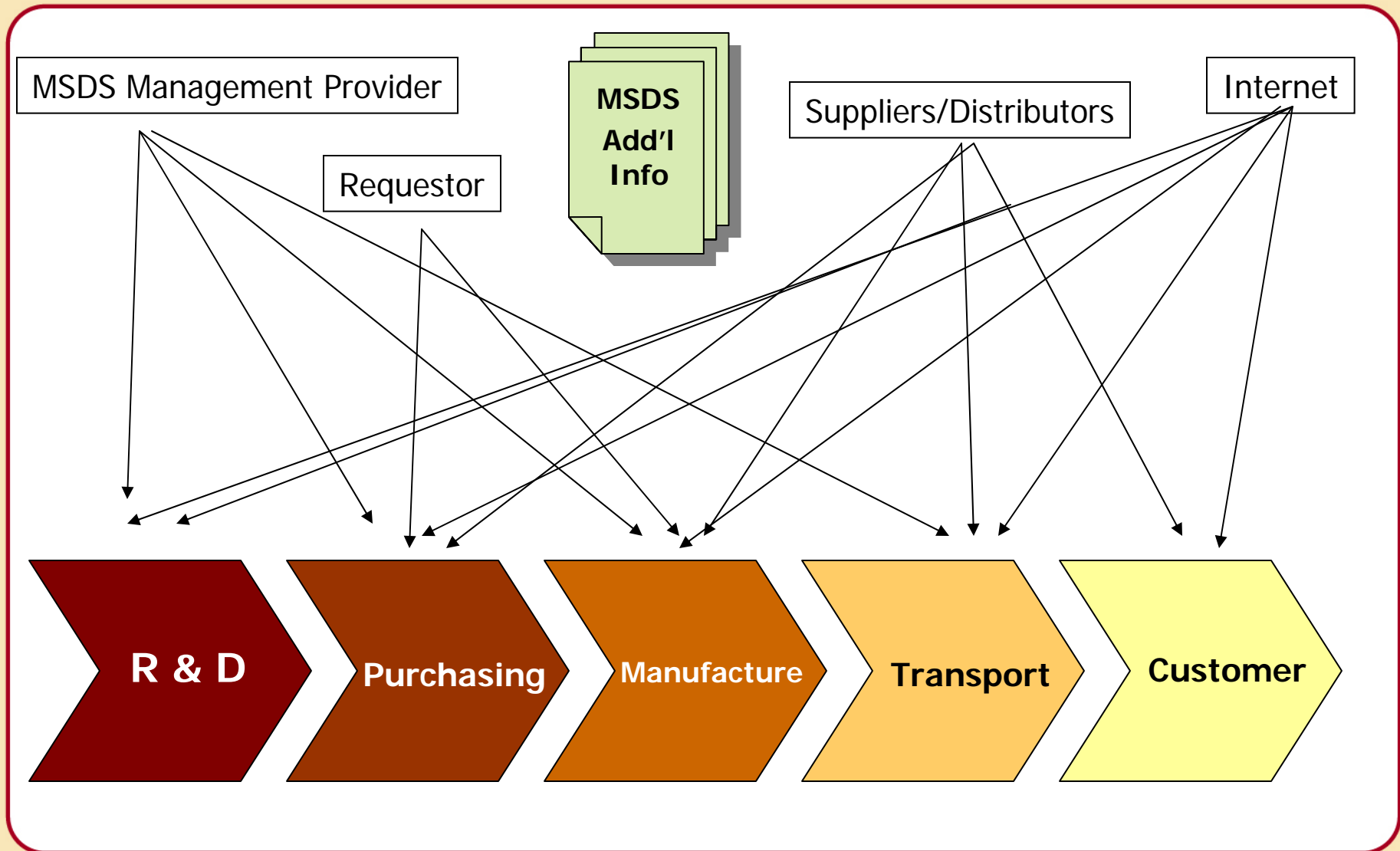


Raw Material Data & the Supply Chain





MSDS & Supply Chain





Raw Material Inventories



- Core Component: Raw Material Inventories
 - Raw Material inventory based on manufacturing locations
 - Quantity information from ERP system for purposes of regulatory reporting
- Methods for collecting Raw Material Inventories
 - Hazardous Materials Inventories stored in online, software application
 - Quantity/Use data stored in enterprise system



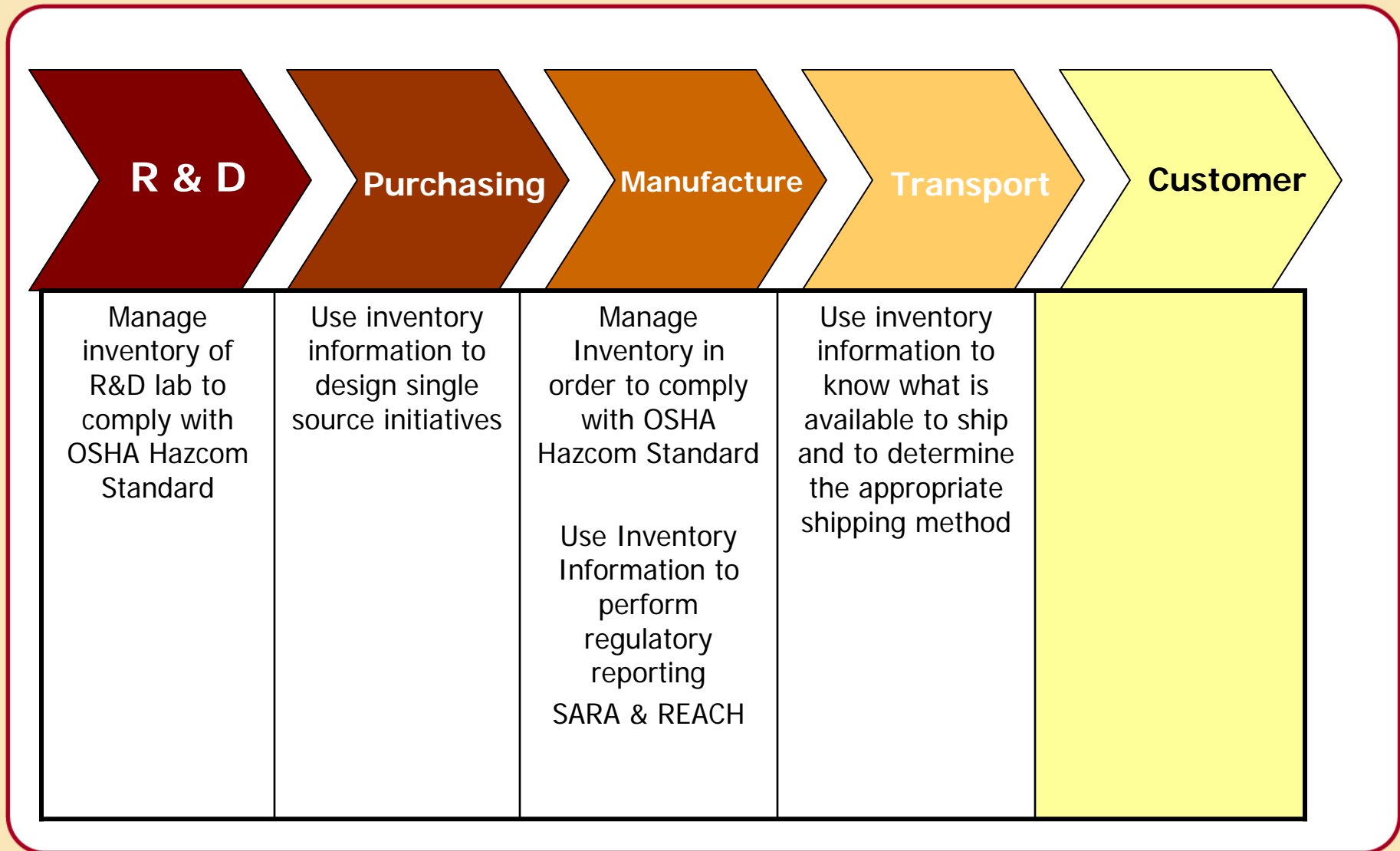
Raw Material Inventories



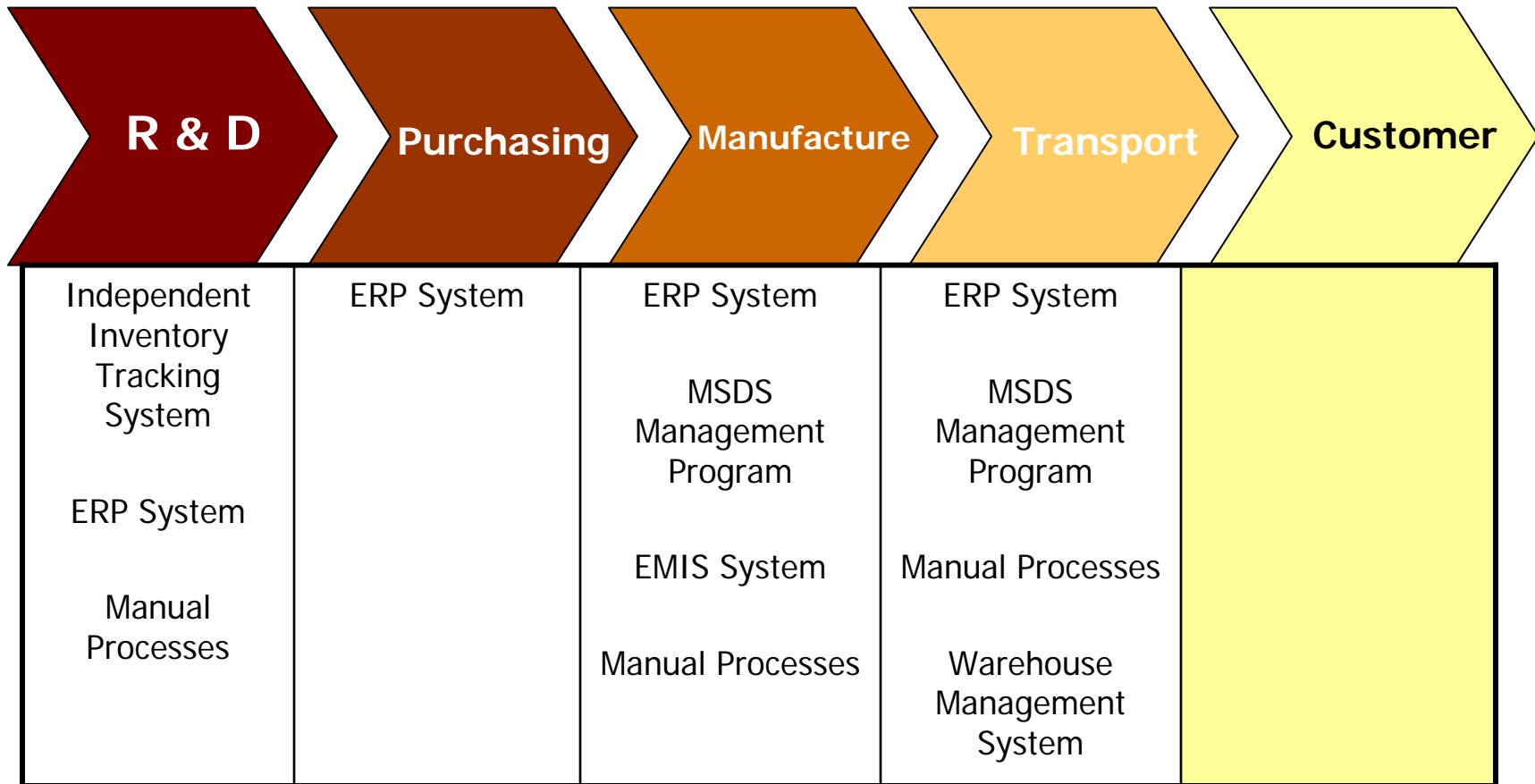
- Keys to a strong Inventory Management Program
 - Efficient Protocols for inventory tracking, including updates and modification.
 - Consistent Data across unique products
 - Avoid product duplication
 - Consistent Corporate Reporting
 - Time & Effort
 - Maintaining an accurate hazardous material inventory requires attention.
 - User enterprise systems for quantity and use tracking to avoid data redundancy.



Inventory & the Supply Chain



How is the inventory tracked across the supply chain?



Full Chemical Lifecycle Approach to EHS Information Management



The 3-Step Approach

- **Step 1:**
 - Centralize your data components across the organization
- **Step 2:**
 - Integrate these components for maximum value
- **Step 3:**
 - Expose the necessary information to only those who need it.

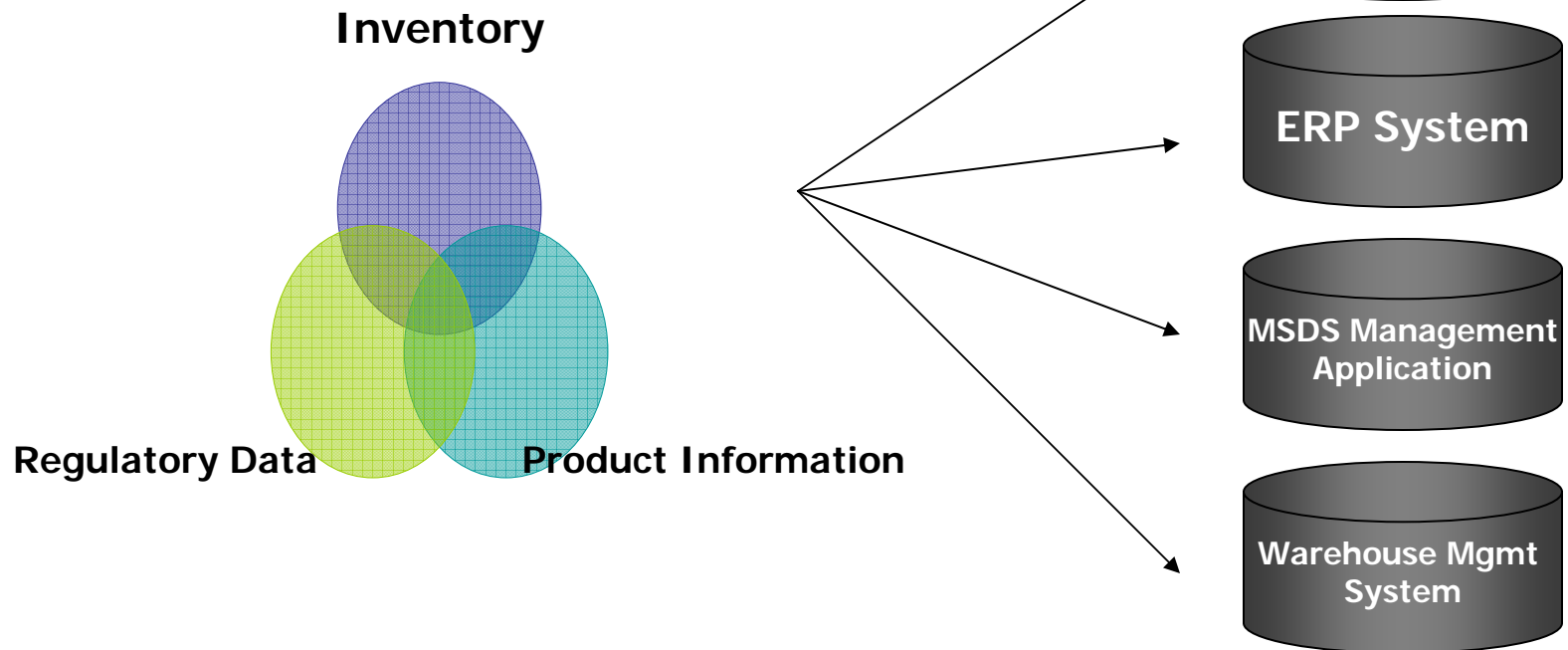


Step 1: Centralize your data sources



- Assemble all stakeholders
 - Corporate (Legal, Risk Management, Marketing, Product Stewardship, IT)
 - Facilities: Plant Managers, EHS Manager, Transportation Managers, local IT)
- Prioritize Objectives
- Evaluate your options for EHS Data
 - Internally Managed
 - Outsourced
- Implement
 - Typically a phased approach with one data component at a time.

Develop integrated systems, either internally or outsourced, that allow you to send each data component across the supply chain.





Step 3: Expose Relevant Data by User



- Understand each user to provide what is relevant
 - Plant Employees: Simple Access to MSDS
 - R&D: Detailed Regulatory Information
 - EHS Management: Regulatory reporting capabilities
 - Customers: MSDS, Technical Data Sheets for Finished Goods

- Significant cost savings
 - Reduction in duplicate data sources
 - Increased efficiencies across supply chain
- Improved Product Stewardship
 - Able to react swiftly to regulatory changes
 - Ability to support customer with MSDS information in a timely manner.
- Change Management
 - Once the baseline of regulations, locations and products is established, you need to track any changes to this baseline.
 - Each of these changes can impact Product Safety and Workplace Safety related protocols.
 - By integrating each of these entities, you can track this impact based on any type of change.



3E Company Demo - Expert Edition

[Home](#)[\(M\)SDS](#)[Product Catalog](#)[Inventory](#)[Chemical Analysis](#)[RegImpact](#)[Admin](#)[Help](#)

[Chemical Analysis](#) > [Regulatory Impact Analysis](#)

1 Select Location (optional)

Finished Goods

[Browse](#)[Search](#)[Clear](#) My locations Eastern Region Europe Finished Goods Western Region

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

From: **January 2005**To: **May 2007**[Analyze](#)

- Data range to identify regulatory changes

- Inventory Data by Facility
- Finished Goods

EPCRA – SARA Title III Section 313

24-7-365
3E COMPANY
ENR INFORMATION & COMPLIANCE SERVICES

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Chemical Analysis > Regulatory Impact Analysis > Results

1/2005-5/2007 - Finished Goods Items per page: 15 ▾

Product Name	CAA_RISK	CAA_602	HON_SOC	HON_HAP	CWA_307	IARC_OE	NIOSH	NTPLIST	CERCLA	ACUTE	TOXIC	CAA112_HAZ	ACGIH O:
<u>1,2-Dichlorobenzene</u>											10/2005		
1025 1038 Black Dry Ink													
1025/1038 Blue Dry Ink Plus													
1025/1038/2510 Black Toner													
5080 Developer													
5100 Developer													

1,2-Dichlorobenzene
 95-50-1 October, 2005

http://192.168.42.87 - Summary Report of Changes - Microsoft Internet Explorer

Back Forward Stop Home Search Favorites Refresh Print Mail Wordpad Notepad Search Web Upgrade your Toolbar Now! Bookmarks

▼ North America

▼ U.S. Federal, Right-To-Know

EPCRA (SARA Title III) Section 313 Toxic Chemical (Reporting Form R Instructions for 2005, as revised January 2006)

Changed in 10/2005

CAS RN: 95-50-1 regulated as a member of the Generics group for CAS RN: 25321-22-6
 Generics group name: DICHLOROBENZENE (MIXED ISOMERS)
 De Minimis Concentration for Section 313 is:
 Old Value:
 New Value: 0.1 %.
 Note(s): *sr75*

Changed in 10/2005

CAS RN: 95-50-1
 Name: 1,2-DICHLOROBENZENE
 De Minimis Concentration for Section 313 is:
 Old Value:
 New Value: 1.0 %.
 Note(s): *sr75*

New De Minimus Concentration Value

Notes

Code	Explanation
sr75	40 CFR 372.27. Final rule at 59 Fed. Reg. 61488 (11/30/94). The EPA established an alternative EPCRA sec. 313 reporting threshold for covered facilities with low annual releases of toxic chemicals. A facility which estimates that its annual reportable amount of a toxic chemical does not exceed 500 pounds may apply an alternate 'manufacture, process, or otherwise use' threshold of 1 million pounds to that chemical, provided that certain conditions in the rule are met. Eligible facilities submit a special certification under 40 CFR 372.95 in lieu of a report under 40 CFR 372.30. 40 CFR 372.27 and 327.95 contain information collection and recordkeeping requirements and will not become effective until approval has been given by OMB.

Done Internet

Impact on ChemSteward: Product Stewardship

- Product Stewardship: Planning
 - Product regulatory requirements of manufacturing, distributing and disposing products are identified through a review of applicable regulations.
- Product Stewardship: Communication
 - MSDS meet appropriate standards
- Product Stewardship: Implementation
 - A procedure in place to ensure all product MSDS, label and supporting product information in reviewed within 5 years.
 - A change control procedure for processes and products includes product stewardship considerations



The End