3E Company HazMat Management
Web Seminar Series

"Analyzing the Business Impact of Regulatory Change on your Chemical Inventory and MSDS Management"

3E Company is the trusted global provider of chemical, regulatory and compliance information services.

Web Seminar Instructions

- The preferred screen resolution is 1024 X 768
- If you have popup blockers please disable them to optimize the visual presentation.
- If you do not have access to the internet, please call (US & Canada) 1-877-407-0625 or (International) +1-201-689-8548.
- Click Q&A button to submit your questions. Questions will be answered at the end of the presentation.
- The web seminar will be recorded. The audio and visual presentation link will be sent to you after the web seminar.

Guest Speaker

Tamie Mainero: Product Manager, 3E Company

- Responsible for product management initiatives, product planning and strategies and product development for 3E's MSDS Management and Transportation services.
- Prior Experience: GW International – 7 years developing chemical logistics and inventory management programs
- Education: University of Oregon – BS Degree in Finance & Marketing

Analyzing the Business Impact of Regulatory Change on your Chemical Inventory and MSDS Management

Tamie Mainero, Product Manager
3E Company
May 18th, 2006

Agenda

- The Foundation
  - Inventory
  - Products (MSDS)
  - Regulatory Information
- Impact of regulatory change based on chemical inventories

The Foundation: Inventory Management

- MSDS Management Systems
  - Hazardous Materials Inventory
    - Where products are located
  - Access to Quantity/Use data
    - Use, Average Daily Usage, Maximum Annual Usage
- Characteristics of a Inventory Management System
  - Typically not all in one system
    - Quantity/Use data stored in enterprise system
    - Hazardous Materials Inventories stores in online, software application
  - Data integration between all systems is key
    - Simple:: Excel Spreadsheets
    - Complex: xMl integration.

The Foundation: Inventory Management

- 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.

The Foundation: Product Data

- Accurate information about each product in your inventory
  - Chemical Constituents
  - Product Classification (NFPA, HMIS, EU, WHMIS)
  - Other Info: VOC, PPE, etc

- Characteristics of product data collection
  - Rely on MSDS Information
  - Issues with MSDS Data
    - Missing information
    - Incomplete information

The Foundation: Product Data

- Keys to accurate product data
  - 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.

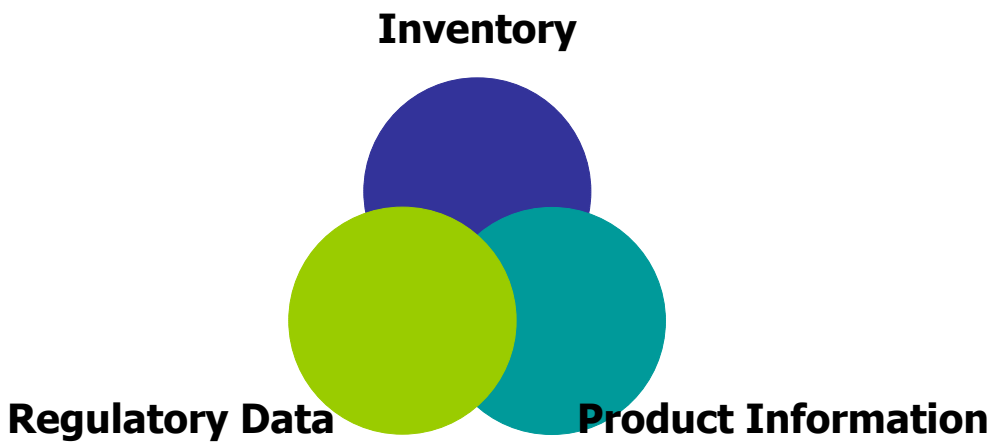
The Foundation: Regulatory Information

- Hundreds of global regulatory lists can affect your EHS protocols.
  - Country, Region, State, Province, City/County
  - Thresholds
- Data typically available at the CAS RN level or chemical grouping.

The Foundation: Regulatory Information

- Keys to solid regulatory content
  - Must be updated regularly
  - Must be able to identify non-CAS RN regulated chemicals. (i.e. Compounds)

Linking the foundation together



Why is integration important?

- Data leverage
  - Share data & information across each EHS discipline
  - Reduce data duplication
  - Improve corporate reporting
- Changes to each part of the foundation can affect your EHS protocols and programs
  - Inventory: New/Discontinued Products, New facilities
  - Product Information: New formulations
  - Regulatory Data: Changes in regulations based on regulatory body or product constituent.

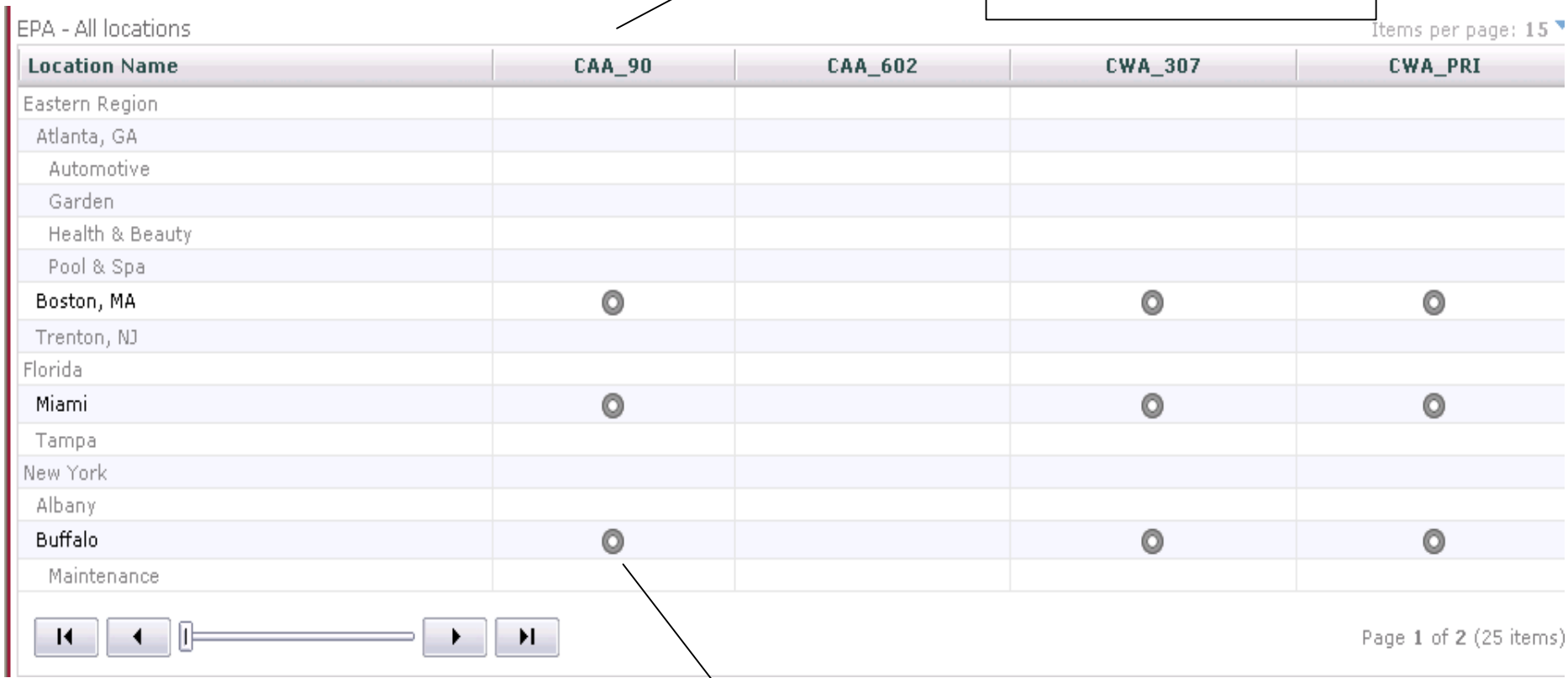
Regulatory Impact: What are the benefits?

Regulatory Impact: Corporate Level Review

- By integrating each part of the foundation you can begin to analyze your risk by corporation or region.
  - Determine what regulations impact your organization/region.
  - Analyze these regulations against each inventory location
- Results:
  - Risk Scorecard
    - Location prioritization by pinpointing locations with the highest level of impact.
  - Workload Management Tool

Example

Clean Air Act Section 112 – Statutory Hazardous Air Pollutants



Indicates the location stores/utilizes products that impacted by selected regulations

Regulatory Impact: Facility Review

- By integrating each part of the foundation you can begin to analyze your risk within your location.
  - Determine what regulations impact you're a particular location.
  - Analyze these regulations against your inventory
- Results:
  - Inventory prioritization by pinpointing products with the highest regulatory impact to a location.
  - Ensure employees at the plant level are prepared to manage this change.
  - Anticipation of regulatory reporting changes

Example

Fully Regulated across 3 out of 4 regulations

EPA - Miami

Items per page: 15

Product Name	CAA_90	CAA_602	CWA_307	CWA_PRI
1025/1038/2510 BLACK TONER	○	○	○	○
BLACK DRY INK/TONER (REPLENISHER) 5614/5113/5114	○	○	○	○
CHEVRON DELO 100 MOTOR OIL	●	○	●	●
COFFEE BREAK POT CLEANER	○	○	○	○
DEVELOPER	○	○	○	○
DRY IMAGER 3080	○	○	○	○
EP DEVELOPER	○	○	○	○
FORMULA 409	○	○	○	○
GO-JO HAND SOAP	○	○	○	○
LACQUER THINNER	◉	○	◉	◉
MERCURY SPILL CLEAN-UP KIT	◉	○	◉	◉
MOBIL DELVAC 1210				
MOBIL SHC 629	◉	○	○	○
MULTI-PURPOSE CAULKING	◉	○	○	○
N,N-DIMETHYLFORMAMIDE, GR	●	○	○	○

Partially regulated in 1 out of 4 regulations

Regulatory Impact: Product Analysis

- Determining what constituents/ingredients are impacting the regulated products in your inventory.
- Results:
  - Focus attention on product constituent and how that constituent is regulated.
  - Continue to evaluate that constituent across all products. What other products in your inventory are impacted by this ingredient.

Example: Lacquer Thinner

Clean Air Act Section 112, 1990 Amendments, Statutory Hazardous Air Pollutants, as amended through 40 CFR 63.61, December 19, 2005

CAS RN: **100-41-4**
Name: *ETHYLBENZENE*

CAS RN: **108-88-3**
Name: *TOLUENE*

CAS RN: **1330-20-7**
Name: *XYLENES (ISOMERS AND MIXTURE)*

CAS RN: **1330-20-7** regulated as a memeber of the Generics group for RN: 106423
Generics group name: *P-XYLENES*

CAS RN: **1330-20-7** regulated as a memeber of the Generics group for RN: 108383
Generics group name: *M-XYLENES*

CAS RN: **1330-20-7** regulated as a memeber of the Generics group for RN: 95476
Generics group name: *O-XYLENES*

CAS RN: **67-56-1**
Name: *METHANOL*
Note(s): **z6**

Notes

z6 Petition to delist methanol (CAS RN 67-56-1) from list of hazardous substances at CAA 112(b)(1) denied by EPA. 66 Fed. Reg. 21929 (5/2/2001).

Regulatory Impact: Changes in the foundation

- 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.
- Ultimately can impact budgets. (positively or negatively)

Regulatory Impact: Changes to Inventory

- Products Additions/Deletions from a particular inventory.
  - Increase or reduce risk pending on product.
  - Require additional employee safety training
  - Modification of product storage facilities

Regulatory Impact: Changes to Product Information

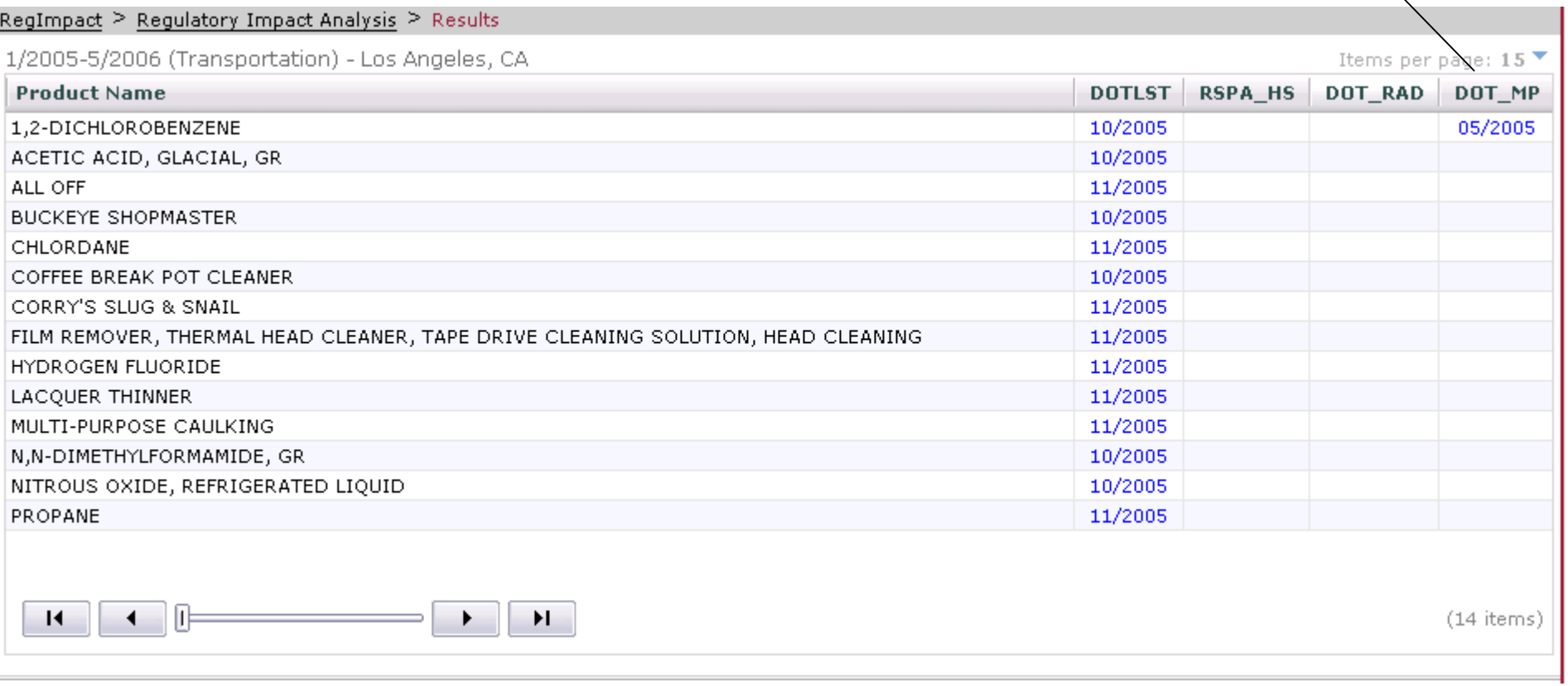
- New Product Constituents/Ingredients
  - Trigger new product classifications
  - Impact transportation requirements

Regulatory Impact: Changes to Regulations

- Determine if the change is significant enough to trigger action.
- Evaluate the impact
  - Chemical Approval
    - Once product is approved what steps are taken to insure the baseline for that chemical approval process in still valid.
    - Should you continue to approve this product for use within your facilities?

Example: Regulatory Impact

DOT Marine Pollutants (49 CFR)



RegImpact > Regulatory Impact Analysis > Results

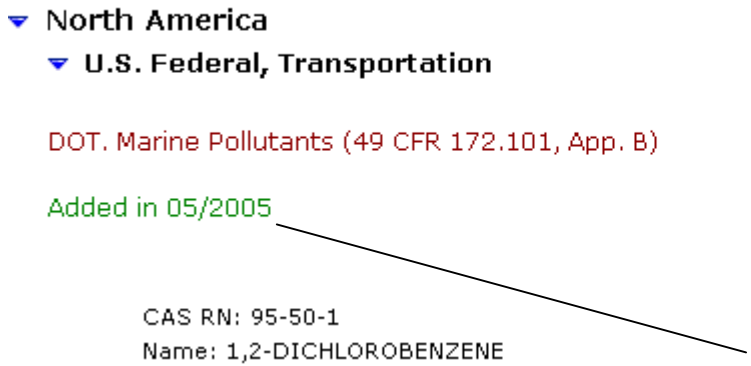
1/2005-5/2006 (Transportation) - Los Angeles, CA

Items per page: 15

Product Name	DOTLST	RSPA_HS	DOT_RAD	DOT_MP
1,2-DICHLOROBENZENE	10/2005			05/2005
ACETIC ACID, GLACIAL, GR	10/2005			
ALL OFF	11/2005			
BUCKEYE SHOPMASTER	10/2005			
CHLORDANE	11/2005			
COFFEE BREAK POT CLEANER	10/2005			
CORRY'S SLUG & SNAIL	11/2005			
FILM REMOVER, THERMAL HEAD CLEANER, TAPE DRIVE CLEANING SOLUTION, HEAD CLEANING	11/2005			
HYDROGEN FLUORIDE	11/2005			
LACQUER THINNER	11/2005			
MULTI-PURPOSE CAULKING	11/2005			
N,N-DIMETHYLFORMAMIDE, GR	10/2005			
NITROUS OXIDE, REFRIGERATED LIQUID	10/2005			
PROPANE	11/2005			

(14 items)

Example: Regulatory Impact



Product Name: 1,2 Dichlorobenzene

Change: Added to the DOT Marine Pollutant List in May of 2005

Regulatory Impact: DOT Marine Pollutant

- Re-classify product for transportation
- Ensure proper training of personnel shipping newly regulated product.

Things to remember:

- MSDS Information is not typically a sole source for product information
- Regulatory changes may not always impact your organization.
- A perfect inventory for your entire organization is VERY difficult.

Summary

- Regulatory changes can impact products at any time and it can impact training, employee safety, transportation and other regulatory compliance programs.
- Managing regulatory changes from a corporate, facility and product perspective can drive company policies and procedures.
- To successfully manage these regulatory changes you need:
  - Strong Inventory
  - Up to date regulatory information
  - MSDS & Product Information

Q & A
and Quiz