“Right To Know” And HazCom: The Ins And Outs Of How OSHA Rules Apply

Presenters:
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former Assistant Secretary of Labor for Occupational Safety and Health

Anne Sefried, Field Applications Specialist, BIOVIA
Ed Foulke is a partner in the Atlanta and Washington, D.C. offices of Fisher & Phillips LLP. He co-chairs the firm's Workplace Safety and Catastrophe Management Practice Group.

Previously, he was the Assistant Secretary of Labor for Occupational Safety and Health. Named by President George W. Bush to head OSHA, he served from April 2006 to November 2008. During his tenure at OSHA, workplace injury, illness and fatality rates dropped to their lowest levels in recorded history.

For more than 30 years, Mr. Foulke has worked in the labor and employment area, focusing on occupational safety and health issues, workplace violence risk assessment and prevention, whistleblower protection, and accident and fatality prevention.

Mr. Foulke also served on the Occupational Safety and Health Review Commission in Washington, D.C., chairing the Commission from March 1990 to February 1994. He was named one of the "50 Most Influential EHS Leaders" by both EHS Today (2010, 2011, 2012 and 2013) and Occupational Hazards (2008) magazines.
Anne Sefried is a Field Applications Engineer for BIOVIA.

Anne Sefried leverages her application expertise at BIOVIA to assist organizations in optimizing their chemical inventory management activities.

Anne graduated from Chapman University with a B.S. in Computer Information Systems.
Agenda

- Why OSHA Adopted the GHS
- Overview of the Changes to the HazCom Standard
- New Safety Data Sheet Information
- New Training Requirements
- Timeline for Implementation
- Hazardous Chemical Management
- Best Practices Solutions
- Q&A
Hazard Communication and the Globally Harmonized System (GHS) Overview
Why Did OSHA Align the HCS with GHS?

- A common, coherent approach to classifying and communicating chemical hazards
  - Harmonized definitions of hazards
  - Specific criteria for labels
  - Harmonized format for safety data sheets
Benefits of Adopting the GHS?

- Increase the quality and consistency of information provided to the employees, employers, and chemical users
  - Reduce confusion/Increase comprehension of hazards
  - Improve downstream risk management
  - Facilitate training
  - Help address literacy problems
- Other benefits include facilitation of international trade in chemicals
Notable Changes to the Hazard Communication Standard

• Using a “specification” approach rather than a “performance-oriented” approach
  – “Hazard Classification” rather than “hazard determination”

• Labels are more defined and will now require:
  – Product identifier
  – Pictogram
  – Signal Word
  – Hazard statement(s)
  – Precautionary statement(s)
  – Name, address, and telephone number
Notable Changes to the Hazard Communication Standard

- “Safety data sheet” (rather than “material safety data sheet”) uses a 16-section format

- Guidance in the GHS (such as decision logics in criteria) has been removed to streamline provisions
  - OSHA has indicated that it may provide a separate document to assist compliance.
Modified Hazard Communication Standard
How Hazard Communication Works

- Chemical Manufacturers and Importers classify the hazards of chemicals they produce or import, and prepare labels and safety data sheets based on the classifications.

Chemicals are Shipped to Employers by Chemical Manufacturers, Importers or Distributors.

- All Employers receive labeled containers and safety data sheets with shipped chemicals.

- All Employers must prepare a written hazard communication program, including a list of the hazardous chemicals in the workplace.

Implement the Program

- All containers of hazardous chemicals labeled.

- Safety data sheets for all hazardous chemicals.

- Workers trained on program elements, hazards, and protective measures.

Keep Information Up-to-Date
Organization of the Final Rule

A. Purpose
B. Scope and Application
C. Definitions
D. Hazard Classification
E. Written Hazard Communication Program
F. Labels and Other Forms of Warning
G. Safety Data Sheets
H. Employee Information and Training
I. Trade Secrets
J. Effective Dates
K. Appendices A-F
Appendices

• Appendix A, Health Hazard Criteria (Mandatory) (NEW)
• Appendix B, Physical Hazard Criteria (Mandatory) (NEW)
• Appendix C, Allocation of Label Elements (Mandatory) (NEW)
• Appendix D, Safety Data Sheets (Mandatory) (NEW)
• Appendix E, Definition of “Trade Secret” (Mandatory)
• Appendix F, Guidance for Hazard Classifications re: Carcinogenicity (Non-Mandatory) (NEW)
Purpose

HazCom 1994

• All hazards to be evaluated
• Comprehensive hazard communication program to transmit information
• Preempt state laws

HazCom 2012

• All hazards to be classified
• Other provisions the same, except OSHA added that the rule is consistent with Revision 3 of the GHS
• Slight clarifying modification was made to the language regarding preemption
Scope and Application

HazCom 1994

- All chemicals known to be present are covered
- Practical accommodations for special situations
- Addresses interface with other Federal laws

HazCom 2012

- Minimal changes except to conform terminology, and remove reference to current Appendix E which has been deleted from the standard and a clarification on Federalism
## Hazard Classification

<table>
<thead>
<tr>
<th>HazCom 1994</th>
<th>HazCom 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance-oriented</strong></td>
<td><strong>Specific and detailed</strong></td>
</tr>
<tr>
<td>– Definitions in paragraph (c), Appendices A and B</td>
<td>– Concept of “classification” vs. determination in current rule</td>
</tr>
<tr>
<td>– Appendix B—parameters for evaluating data</td>
<td>– Each hazard class has detailed criteria to apply to data on the chemical</td>
</tr>
<tr>
<td>– “Floor” of chemicals considered hazardous</td>
<td>– No floor; based on weight of evidence</td>
</tr>
<tr>
<td>– “One study” rule</td>
<td>– Mixture rules are specific to each hazard class</td>
</tr>
<tr>
<td>– Standardized mixture cut-off rules</td>
<td></td>
</tr>
</tbody>
</table>
Hazard Classification

• Each physical or health hazard is a “hazard class” (e.g., Carcinogenicity is a hazard class)

• A “hazard class” may be sub-divided in the criteria into several “hazard categories” based on the degree of severity of the hazard

• Placing a chemical into a “hazard class”, and where necessary, a “hazard category”, is the concept of classification—determining not only the hazard, but also the severity of the effect
Hazard Classification

• Manufacturers are still responsible for determining the hazards of the chemicals they produce or import

• Classification (similar to hazard determination) is based on the full range of available information. The procedures for determining if the manufacturer has properly performed the hazard classification are provided in Appendix A (health) and Appendix B (physical)
<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Skin Corrosion/ Irritation</td>
<td>1A</td>
</tr>
<tr>
<td></td>
<td>1B</td>
</tr>
<tr>
<td></td>
<td>1C</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Serious Eye Damage/ Eye Irritation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2A</td>
</tr>
<tr>
<td></td>
<td>2B</td>
</tr>
<tr>
<td>Respiratory or Skin Sensitization</td>
<td>1</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>1A</td>
</tr>
<tr>
<td></td>
<td>1B</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>1A</td>
</tr>
<tr>
<td></td>
<td>1B</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>1A</td>
</tr>
<tr>
<td></td>
<td>1B</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Lactation</td>
</tr>
<tr>
<td>STOT – Single Exposure</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>STOT – Repeated Exposure</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Aspiration</td>
<td>1</td>
</tr>
<tr>
<td>Simple Asphyxiants</td>
<td>Single Category</td>
</tr>
</tbody>
</table>
HazCom 1994: Mixtures

- For mixtures, the approach for health hazards is to base it on a percentage cut-off of 0.1% for carcinogens, and 1% for all other effects.
HazCom 2012: Mixtures

• GHS has a tiered approach to mixtures, with each health hazard class having a specific approach
  – Step 1: Use available test data on the mixture as a whole to classify the mixture based on the substance criteria
  – Step 2: Use bridging principles to extrapolate from other data (e.g., dilution principle)
  – Step 3: Estimate hazards based on known information regarding the ingredients of the mixture (cut-offs may be applied)
  – Except for chronic health hazards

• Chemical manufacturers and importers may rely on information provided in ingredient SDSs unless they have a reason to know that it is inaccurate
# Physical Hazards

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosives</td>
<td></td>
</tr>
<tr>
<td>Unstable Explosives</td>
<td>Div 1.1</td>
</tr>
<tr>
<td>Flammable Gases</td>
<td>1</td>
</tr>
<tr>
<td>Flammable Aerosols</td>
<td>1</td>
</tr>
<tr>
<td>Oxidizing Gases</td>
<td>1</td>
</tr>
<tr>
<td>Gases under Pressure</td>
<td></td>
</tr>
<tr>
<td>Compressed Gases</td>
<td>1</td>
</tr>
<tr>
<td>Liquefied Gases</td>
<td></td>
</tr>
<tr>
<td>Refrigerated Liquefied Gases</td>
<td></td>
</tr>
<tr>
<td>Dissolved Gases</td>
<td></td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>1</td>
</tr>
<tr>
<td>Flammable Solids</td>
<td>1</td>
</tr>
<tr>
<td>Self-Reactive Chemicals</td>
<td></td>
</tr>
<tr>
<td>Type A</td>
<td>Type B</td>
</tr>
<tr>
<td>Pyrophoric Liquids</td>
<td>1</td>
</tr>
<tr>
<td>Pyrophoric Solid</td>
<td>1</td>
</tr>
<tr>
<td>Pyrophoric Gases</td>
<td>Single category</td>
</tr>
<tr>
<td>Self-heating Chemicals</td>
<td>1</td>
</tr>
<tr>
<td>Chemicals, which in contact with water, emit flammable gases</td>
<td>1</td>
</tr>
<tr>
<td>Oxidizing Liquids</td>
<td>1</td>
</tr>
<tr>
<td>Oxidizing Solids</td>
<td>1</td>
</tr>
<tr>
<td>Organic Peroxides</td>
<td></td>
</tr>
<tr>
<td>Type A</td>
<td>Type B</td>
</tr>
<tr>
<td>Corrosive to Metals</td>
<td>1</td>
</tr>
<tr>
<td>Combustible Dusts</td>
<td>Single category</td>
</tr>
</tbody>
</table>
Hazards Not Otherwise Classified

- This definition was added to ensure that hazards currently covered by HCS continue to be covered.

- Information will be required on the safety data sheets in Section 2.

- Hazard information on the label, is not mandatory, but can be provided under supplementary information.

- Such hazards must also be addressed in employee training.
Simple Asphyxiant and Pyrophoric Gas

- “Simple asphyxiant” means a substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death
  - Label: Warning. May displace oxygen and cause rapid suffocation

- “Pyrophoric gas” means a chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below
  - Label: Danger. Catches fire spontaneously if exposed to air
Combustible Dust

• Combustible dust is covered separately from HNOC, but is not specifically defined

• Guidance for defining combustible dust is to be taken from existing documents, including the directive for the National Emphasis Program; the NFPA standards also provide useful information

• Combustible dust must be addressed on labels where appropriate:
  – *Warning.* *May form combustible dust concentrations in air*
  – Paragraph (f)(4) may apply to materials shipped in *solid form,* that create combustible dust when processed
Written Hazard Communication Program

HazCom 1994

- Employers must have a written program describing how the rule will be implemented, including a list of hazardous chemicals, methods for informing employees about non-routine tasks

HazCom 2012

- No changes
- Employers are required to make sure the program is current when the new provisions are implemented (e.g., list of hazardous chemicals may have to be updated)
## Labels and Other Forms of Warning

<table>
<thead>
<tr>
<th>HazCom 1994</th>
<th>HazCom 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Shipped containers to be labeled with identity, appropriate hazard warnings, responsible party</td>
<td>• Shipped containers to be labeled with product identifier; signal word; hazard statement(s); pictograms; precautionary statements; and responsible party</td>
</tr>
<tr>
<td>• Performance-oriented, specifics left to discretion of chemical manufacturer or importer</td>
<td>• Specifies information by hazard class and category</td>
</tr>
</tbody>
</table>
Approach to Labels

- The final rule—like the GHS—is a specification approach to labels. In Appendix C, OSHA has indicated by hazard class and hazard category the label elements that must be on the label.

- Appendix C is basically a cookbook approach to labeling—once classification of the hazards is completed, Appendix C is to be consulted to determine how to convey the required information.
Label Requirements – Shipped Containers

- Product identifier
- Signal word
- Hazard statement(s)
- Pictogram(s)
- Precautionary statement(s)
- Name, address, phone number of responsible party
# HCS Pictograms and Hazards

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flame</th>
<th>Exclamation Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Carcinogen</td>
<td>- Flammables</td>
<td>- Irritant (skin and eye)</td>
</tr>
<tr>
<td>- Mutagenicity</td>
<td>- Pyrophorics</td>
<td>- Skin Sensitizer</td>
</tr>
<tr>
<td>- Reproductive Toxicity</td>
<td>- Self-Heating</td>
<td>- Acute Toxicity (harmful)</td>
</tr>
<tr>
<td>- Respiratory Sensitizer</td>
<td>- Emits Flammable Gas</td>
<td>- Narcotic Effects</td>
</tr>
<tr>
<td>- Target Organ Toxicity</td>
<td>- Self-Reactives</td>
<td>- Respiratory Tract</td>
</tr>
<tr>
<td>- Aspiration Toxicity</td>
<td>- Organic Peroxides</td>
<td>- Irritant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Hazardous to Ozone Layer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Non-Mandatory)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Cylinder</th>
<th>Corrosion</th>
<th>Exploding Bomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Gases Under Pressure</td>
<td>- Skin Corrosion/</td>
<td>- Explosives</td>
</tr>
<tr>
<td></td>
<td>Burns</td>
<td>- Self-Reactives</td>
</tr>
<tr>
<td></td>
<td>- Eye Damage</td>
<td>- Organic Peroxides</td>
</tr>
<tr>
<td></td>
<td>- Corrosive to Metals</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flame Over Circle</th>
<th>Environment (Non-Mandatory)</th>
<th>Skull and Crossbones</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Oxidizers</td>
<td>- Aquatic Toxicity</td>
<td>- Acute Toxicity (fatal or toxic)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Red vs. Black Borders

- OSHA is requiring red borders regardless of the shipment’s destination
- The red borders increase comprehensibility
- Blank red diamonds are not permitted on a label
Updating Labels

- OSHA proposed to require labels to be updated within three months of getting new and significant information about the hazards.
- The final rule requires containers shipped six months after the information is available to be labeled accordingly.
New style Label (GHS)

Xyz... Chemical

WARNING

Flammable Liquid and vapor
Harmful if swallowed
May cause damage to organs (liver)
May cause damage to organs through prolonged or repeated exposure (heart)
Suspected of damaging fertility

Keep away from heat, sparks, open flames and hot surfaces - No smoking. Do not breathe vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use protective equipment as required. Wear protective gloves and eye protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Shore locked up in a well ventilated place. Keep cool. Dispose of contents and container in accordance with local, state and federal regulations.

First Aid:
If swallowed: Call a doctor if you feel unwell, Rinse mouth.
If on skin or hair: Remove immediately all contaminated clothing. Rinse skin with water.
If exposed or if you feel unwell: call a doctor.

Fire:
In case of fire: Use water spray foam, dry chemical or carbon dioxide (CO₂) for extinction

GHS Company, 123 Global Drive, Cincinnati, OH telephone (800) 555-8888
Workplace Labeling

• OSHA is maintaining the approach used in the current HCS that allows employers to use workplace-specific labeling systems as long as they provide the required information.

• However, such workplace label systems may need to be updated to make sure the information is consistent with the new classifications.

• NFPA/HMIS Systems
  – (ratings systems v. classification)
Safety Data Sheets

HazCom 1994

- Specifies what information is required, but chemical manufacturer or importer can use whatever format or order of information they want

HazCom 2012

- Mandates 16-section SDS headings, order of information, and what information is to be provided under the headings
- Will not enforce sections 12-15 that require information outside OSHA’s jurisdiction
# 16-Section Safety Data Sheet

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identification of the substance or mixture and of the supplier</td>
</tr>
<tr>
<td>2</td>
<td>Hazards identification</td>
</tr>
<tr>
<td>3</td>
<td>Composition/information on ingredients Substance/Mixture</td>
</tr>
<tr>
<td>4</td>
<td>First aid measures</td>
</tr>
<tr>
<td>5</td>
<td>Firefighting measures</td>
</tr>
<tr>
<td>6</td>
<td>Accidental release measures</td>
</tr>
<tr>
<td>7</td>
<td>Handling and storage</td>
</tr>
<tr>
<td>8</td>
<td>Exposure controls/personal protection</td>
</tr>
<tr>
<td>9</td>
<td>Physical and chemical properties</td>
</tr>
<tr>
<td>10</td>
<td>Stability and reactivity</td>
</tr>
<tr>
<td>11</td>
<td>Toxicological</td>
</tr>
<tr>
<td>12</td>
<td>Ecological information (non mandatory)</td>
</tr>
<tr>
<td>13</td>
<td>Disposal considerations (non mandatory)</td>
</tr>
<tr>
<td>14</td>
<td>Transport information (non mandatory)</td>
</tr>
<tr>
<td>15</td>
<td>Regulatory information (non mandatory)</td>
</tr>
<tr>
<td>16</td>
<td>Other information including information on preparation and revision of the SDS</td>
</tr>
</tbody>
</table>
Appendix D

• Specifies the minimum information to be included in each of the 16 sections

• Two revisions in this information are in the final rule:
  – ACGIH TLVs continue to be required on the SDS
  – Information regarding carcinogenicity classifications by IARC and NTP also continue to be required
Employee Information and Training

**HazCom 1994**
- Requires employee information and training before an employee is exposed to the hazardous chemicals in the workplace, and whenever the hazard changes.

**HazCom 2012**
- Clarifies that labels on shipped containers & workplace labels must be explained and in SDS format.
- Employees will have to be trained on new label and SDS formats before all provisions of rule are effective.
Training

• Employers shall train employees regarding the new label elements and safety data sheets format by December 1, 2013

• Safety Data Sheet Format
  – Train the employees on the standardized 16 section format and the type of information they would find in the various sections
Training

• Label elements
  – Train employees on the type of information that the employee would expect to see on the new labels
  – How they might use that information
    • Product identifier, signal word, hazard statement(s), pictogram(s), precautionary statement(s), and name, address and phone number of the responsible party
    • General understanding how the elements interact
      • Ex., explain there are two signal words: Danger means a more severe hazard within a hazard class. Warning is for the less severe hazard
I. Trade Secrets

HazCom 1994

• Allows specific chemical identity to be protected when it is a legitimate trade secret
• Specifies conditions for protection, and for release when there is a safety and health need for the information

HazCom 2012

• Process remains the same
• Percentage of a substance in a mixture is also considered to be a type of trade secret subject to the provisions in the rule
## Effective Dates – HazCom 2012

<table>
<thead>
<tr>
<th>Effective Completion Date</th>
<th>Requirement(s)</th>
<th>Who</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1, 2013</td>
<td>Train employees on the new label elements and SDS format.</td>
<td>Employers</td>
</tr>
<tr>
<td>June 1, 2015*</td>
<td>Comply with all modified provisions of this final rule, except:</td>
<td>Chemical manufacturers, importers, distributors and employers</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>Distributors may ship products labeled by manufacturers under the old system until December 1, 2015.</td>
<td>All chemical manufacturers, importers, distributors and employers</td>
</tr>
<tr>
<td>June 1, 2016</td>
<td>Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.</td>
<td>Employers</td>
</tr>
<tr>
<td>Transition Period</td>
<td>Comply with either 29 CFR 1910.1200 (this final standard), or the current standard, or both</td>
<td>All chemical manufacturers, importers, distributors and employers</td>
</tr>
</tbody>
</table>

*This date coincides with the European Union implementation date for classification of mixtures.*
The Workplace

• For Employers
  – Initial employee training on the label elements
  – Minimal training on new SDS format
  – Continue to maintain the updated SDSs
  – Review current hazard communication program and update as necessary

• For Manufacturers
  – Initial start-up costs associated with reclassification, producing new labels, safety data sheets, training
Fisher & Phillips LLP

is dedicated exclusively to representing employers in the practice of employment, labor, benefits, OSHA, and immigration law and related litigation.

THESE MATERIALS AND THE INFORMATION PROVIDED DURING THE PROGRAM SHOULD NOT BE CONSTRUED AS LEGAL ADVICE OR AS CRITICAL OF THE CURRENT OR PAST ADMINISTRATIONS.
How do we ensure compliance with OSHA’s Right to Know and Hazard Communication Program as it aligns with GHS?
What Do We Know?

- New Classifications of Materials
- New Labeling Elements and Requirement
- New Safety Data Sheets
GHS Transition

New Label Elements:
1. Product Identifier
2. Signal Word
3. Hazard Statement
4. Precautionary Statement
5. Supplier Identification
6. Pictograms

The Basic Parts of a GHS-Compliant Label:
- Danger:
  - Flammable liquid and vapor. Causes severe eye damage. May cause drowsiness and dizziness.
  - Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes; use protective breathing apparatus if necessary. Wear protective gloves/eye protection/face protection. In case of contact with eyes, rinse immediately with plenty of water for several minutes. Remove contact lenses if present. Continuing rinsing.
  - Keep out of the reach of children. If swallowed, seek medical advice immediately.

Acme Chemical Company • 711 Roadrunner St. • Chicago, IL 60601 USA • www.acmechem.com • 1-322-448-5567
Fill Weight: 18.65 lbs. Lot Number: 856754434
Gross Weight: 20 lbs. Fill Date: 6/21/2013
Expiration Date: 6/21/2020
What are the Challenges?

- Not knowing what chemicals are on site
- Not knowing what SDS need updating
- No place to track new classifications
- No way to print GHS compliant labels
- No simple means to update chemical or SDS info
What is the Common Denominator?

INCLUDING A LIST OF THE HAZARDOUS CHEMICALS IN THE WORKPLACE

- Chemical Manufacturers and Importers classify the hazards of chemicals they produce or import and prepare labels and safety data sheets based on the classifications.
- All Employers receive labeled containers and safety data sheets with shipped chemicals.
- All Employers must prepare a written hazard communication program, including a list of the hazardous chemicals in the workplace.
- All containers of hazardous chemicals labeled.
- Safety data sheets for all hazardous chemicals.
- Workers trained on program elements, hazards, and protective measures.

Chemicals are Shipped to Employers by Chemical Manufacturers, Importers or Distributors.
How Do I Address This?

- Use ‘Off the Shelf’ Web-based Solution
- Implement Centralized Receiving
- Get the Right People Involved
- Barcode All Inventory
- Adopt Simple Workflows
- Incorporate Safety and Compliance
BIOVIA CISPro

- Real-time barcode system
- Manage chemicals, biologicals, supplies
- Track inventory receipt to disposal
- Easy to use, intuitive user interface
- Location, owner, expiration date monitoring
- Product-specific SDS management
- Regulatory association and reporting
- Email notifications
Bridge the Gap

<table>
<thead>
<tr>
<th>Lab Managers</th>
<th>EHS Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Simple lookup tool</td>
<td>• Accurate reporting</td>
</tr>
<tr>
<td>• Increased visibility</td>
<td>• Ensure regulatory compliance</td>
</tr>
<tr>
<td>• Reduce searching for chemicals</td>
<td>• Monitor expiration dates</td>
</tr>
<tr>
<td>• Increase lab efficiency</td>
<td>• Accurate list of chemicals</td>
</tr>
<tr>
<td>• Reduce PO requests</td>
<td>• Reduce hazardous waste</td>
</tr>
<tr>
<td>• Reduce chemical costs</td>
<td>• Reduce chemical inventory on site</td>
</tr>
<tr>
<td>• SDS access</td>
<td>• SDS management</td>
</tr>
</tbody>
</table>
Tips and Solutions to Ensure Compliance

- Ability to track GHS elements per chemical
- Ability to track/report on SDS revision date
- Ability to differentiate MSDS/SDS for easy visibility
Tips and Solutions to Ensure Compliance

- Ability to print GHS compliant labels
Summary

◆ Accurate chemical inventory management is the basis for accurate hazardous materials reporting and compliance

◆ Successful compliance is knowing how regulations affect the organization, how to address those regulations, and streamlining chemical and hazardous materials workflows to ensure the accurate chemical inventory data and site safety
“Right To Know” and HazCom: The Ins and Outs of How OSHA Rules Apply to Research Organizations

Q&A

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