



# HazCom 2012 Update

DOMESTIC AND INTERNATIONAL IMPLEMENTATION ISSUES



# Topics to be addressed

- u Domestic Implementation
  - u Training due December 1, 2013
  - u Guidance available
  - u California implementation
- u International Implementation
  - u Coordination with Canada
  - u Revision 5 to the GHS
  - u United Nations' Work Programme 2013-2014
  - u Implementation Study in the European Union

# Domestic Implementation

# Training

- u The first compliance date under the final rule is fast approaching:
  - u *Employers shall train employees regarding the new label elements and safety data sheet format by December 1, 2013*
- u The 2013 training thus does NOT include a requirement to re-train on all hazards
- u The training is to ensure that employees understand the new label and SDS approach

# Training Tools Available from OSHA

- u Fact Sheet on December 1, 2013 training requirements
- u Wallet card
- u Brief on Labels and Pictograms
  - u Quick Card on Labels
  - u Quick Card on Pictograms
- u Brief on Safety Data Sheets
  - u Quick Card on Safety Data Sheets

# Additional Tools

- u Our presentation at the April 2013 SCHC meeting is on the SCHC web page, and addresses the required training in detail
- u The recent webinar hosted by SCHC (accessible on both OSHA's and SCHC's web pages) also addressed the training requirements
- u SCHC 2012 webinar is still active

# Additional Guidance

- u Small Entity Compliance Guide
  - u The guide is in the final stages of preparation for publication
  - u Addresses how to establish an employer's hazard communication program for employees (does not include hazard classification)
  - u Includes a Quick Guide to Hazard Communication Training
  - u There will also be a Fact Sheet that covers the steps to an effective hazard communication program that is drawn from the Small Entity Compliance Guide
- u Materials still in Development
  - u Enforcement Directive
  - u Hazard Classification Guidance

# California Implementation

- u California has proposed adoption of HazCom 2012, including some revisions to the hazard classification requirements of the standard
- u The California process is ongoing, and OSHA has not yet received the rule for formal review, although there have been informal discussions with the State
- u The State has scheduled a public hearing for October 17, 2013
- u The standard for review is that the requirements must be at least as effective, and cannot pose an undue burden on interstate commerce
  - u If different, the State must show a compelling local need for the requirement



# International Implementation

# Coordination with Canada

- u Under the auspices of the Regulatory Cooperation Council (RCC), the United States and Canada are working together on implementation issues regarding the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
- u A meeting of the two countries was convened in June to discuss issues related to the initiative

# RCC Commitment on Workplace Chemicals

- u Align and synchronize implementation of common classification and labelling requirements for workplace chemicals within the mandate of the US Occupational Safety and Health Administration and Health Canada through:
  - u Making compatible our respective standards-related measures; and,
  - u Enhancing and strengthening the sharing and exchange of regulatory information.

# Key Principles

- u No reduction in worker health and safety in either jurisdiction;
- u Respecting the respective regulatory process; and,
- u Respecting the legislative framework.

# Key Deliverables

- 1) Establish a mechanism to coordinate the implementation of the GHS and any future updates on the GHS in our respective jurisdictions;
- 2) As part of the permanent mechanism, set up a process for stakeholder input on the RCC GHS initiatives;
- 3) Coordinate technical interpretations related to GHS implementation for workplace chemicals; and
- 4) Implement the GHS for workplace chemicals.

# Progress Update: Coordination Mechanism

- u Memorandum of Understanding (MOU) between Health Canada and US-OSHA developed that:
  - u Establishes collaborative process
  - u Formally establishes a working group
  - u Outlines common principles
  - u Allows for ongoing alignment
  
- u MOU formally signed at the RCC meeting on June 19<sup>th</sup>

## Progress Update: Coordination Mechanism

- u US-OSHA held a public consultation in April 2012 on the RCC coordination mechanism.
- u Health Canada held a key stakeholder consultation in May 2012 on the RCC coordination mechanism – a document was circulated outlining key principles.
- u Both agencies coordinate stakeholder input prior to the UN GHS meetings through existing stakeholder committees.
- u Both agencies meet to coordinate views prior to each UN GHS meeting.

## Progress Update: Coordinate Technical Implementation

- u Health Canada and US-OSHA meet routinely via teleconference to review technical interpretations and provide regulatory updates.
- u Health Canada and the provinces and territories have put in place a training working group that will feed into the development of joint/common educational materials with the US.
- u US-OSHA is developing technical guidance products and will consult with Health Canada prior to publication.



## Progress Update: Implement GHS

- u US-OSHA released its Final Rule in March 2012.
- u Health Canada undertook consultations on the legislative amendments in June 2012.

## Next Steps

- u Next Steps – US-OSHA:
  - Issue technical guidance documents
    - Hazard classification
    - Model training
- u Next Steps – Health Canada:
  - Table amended legislation

## Next Steps

- u Stakeholder Public Meeting:
  - u Public meeting planned for Fall 2013 on proposed Canadian regulations and US-OSHA technical guidance for hazard classification
  
- u Joint Educational Materials:
  - u Next area of focus for the workplan

## Revision 5 of the GHS

- u The new text of the GHS is now available online, or for purchase as a book.
  - u Online access to pdf files:
    - u [http://www.unece.org/trans/danger/publi/ghs/ghs\\_rev05/05\\_files\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev05/05_files_e.html)
  - u Purchase the book:
    - u <http://www.unece.org/trans/danger/publi/order.html>

## Changes in Revision 5

- u Since many countries are involved in implementation, revisions being made to the GHS are generally based on feedback from those countries on areas that need to be clarified or refined.
- u Many members of the UN Subcommittee on GHS are working to ensure that major modifications are limited during this implementation process.
- u The specific changes that were made in Rev. 5 are detailed in a report for the Subcommittee:
  - u [www.unece.org/fileadmin/DAM/trans/doc/2013/dgac10/ST-SG-AC10-40a3e.pdf](http://www.unece.org/fileadmin/DAM/trans/doc/2013/dgac10/ST-SG-AC10-40a3e.pdf)

## Oxidizing Solid

- u An additional test method has been introduced for oxidizing solids.
- u This test method was also approved within the UN Transport Subcommittee.
- u One of the reasons for adding this test method involved the health effects of the substance referred to in the test (potassium bromate)—it is carcinogenic and acutely toxic by the oral route. The new test method uses calcium peroxide.

# Criteria for Oxidizing Solid: Table 2.14.1

Category	Criteria using test O.1	Criteria using test O.3
1	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time less than the mean burning time of a 3:2 mixture (by mass) of potassium bromate and cellulose.	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate greater than the mean burning rate of a 3:1 mixture (by mass) of calcium peroxide and cellulose.
2	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 2:3 mixture (by mass) of potassium bromate and cellulose and the criteria for Category 1 are not met.	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:1 mixture (by mass) of calcium peroxide and cellulose and the criteria for Category 1 are not met.
3	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning time equal to or less than the mean burning time of a 3:7 mixture (by mass) of potassium bromate and cellulose and the criteria for Categories 1 and 2 are not met.	Any substance or mixture which, in the 4:1 or 1:1 sample-to-cellulose ratio (by mass) tested, exhibits a mean burning rate equal to or greater than the mean burning rate of a 1:2 mixture (by mass) of calcium peroxide and cellulose and the criteria for Categories 1 and 2 are not met.

# Editorial Changes

- u The criteria for skin corrosion/irritation (Chapter 3), and eye damage/irritation (Chapter 4), have been edited for clarity.
- u The most extensive changes are to Chapter 3. The approach to corrosion and irritation is tiered, and many thought the text and decision logics were difficult to follow, and had some inconsistencies.
- u Therefore, Revision 5 modifies the text to hopefully make it easier to follow, and uses consistent terminology.
- u These changes have been pending for several years. When OSHA adopted the final rule, some of the clarity changes identified were included at that time although they had not been finalized in the GHS.






# Skin Corrosion/Irritation

- u A new introductory paragraph describes the approach adopted:
  - u 3.2.1.2 In a tiered approach, emphasis should be placed upon *existing human data*, followed by *existing animal data*, followed by *in vitro* data and then *other sources of information*. Classification results directly when the data satisfy the criteria. In some cases, classification of a substance or a mixture is made on the basis of the weight of evidence within a tier. In a total weight of evidence approach all available information bearing on the determination of skin corrosion/irritation is considered together, including the results of appropriate validated *in vitro* tests, relevant animal data, and human data such as epidemiological and clinical studies and well-documented case reports and observations (see Chapter 1.3, para. 1.3.2.4.9).

# Classification and Labelling Summary Tables

- u Earlier editions of the GHS included both Annex 1 (Allocation of Label Elements) and Annex 2 (Classification and Labelling Summary Tables), which displayed similar information in different formats.
- u In Rev. 5, these two annexes have been combined into one new Annex 1 (Classification and Labelling Summary Tables), and the codes for the hazard statements have been included.
- u In OSHA's final rule, the Agency had already combined information into one table for Appendix C (which includes precautionary statements as well).

# Sample from New GHS Annex 1










Classification		Labelling				Hazard statement codes
Hazard class	Hazard category	Pictogram		Signal word	Hazard statement	
		GHS	UN Model Regulations			
Skin corrosion/irritation	1			Danger	Causes severe skin burns and eye damage	H314
	2		Not required	Warning	Causes skin irritation	H315
	3 <sup>a</sup>	No pictogram	Not required	Warning	Causes mild skin irritation	H316

## Annex 3, Precautionary Statements

- u Rev. 5 includes a number of editorial changes to precautionary statements in the GHS.
- u Some of the changes were to simplify the application of the phrases, and others were to eliminate duplication. Tables provided for each hazard class were also modified to reflect the revisions.
- u The GHS precautionary statements remain as “non-harmonized”—countries are not required to use these specific statements to be harmonized, but must include a requirement for precautionary statements in their rules.
- u The precautionary statements in the OSHA final rule are mandatory.

# Codification of Pictograms

- u Numbers have been assigned to each pictogram to codify them (similar to what was done for hazard statements and precautionary statements).
- u Language was added to ensure that the pictogram numbers should not be placed on the label.

Code	Hazard Pictogram	Symbol
GHS01		Exploding bomb
GHS02		Flame
GHS03		Flame over circle
GHS04		Gas cylinder
GHS05		Corrosion
GHS06		Skull and crossbones
GHS07		Exclamation mark
GHS08		Health hazard
GHS09		Environment

## Annex 4: Guidance on Safety Data Sheets

- u A number of editorial revisions were made to clarify and explain the guidance on what is to be included on SDSs.
- u One specific addition involves what is appropriate to include re: combustible dust:
  - u “The statement “May form explosible dust-air mixture if dispersed” is appropriate in the case of a dust explosion hazard.”

# Work Programme for 2013-2014

- u Nanomaterials

- u A correspondence group will address the issue of how the GHS applies to manufactured nanomaterials.
- u The review of applicability is to take into account the progress of ongoing international scientific work.
- u The eventual aim is to develop guidance.

- u Dust Explosion Hazards

- u Terms of reference have been established to guide the work of a correspondence group to examine issues related to classification of dust explosion hazards.



## Work Programme, cont.

- u Aspiration Hazards
  - u Viscosity criteria
  - u Classification of aerosol/mist products
- u Development of a list of chemicals classified in accordance with the GHS
  - u Process must be clear, transparent, and follow GHS principles
  - u All hazard classes and categories must be included—set priorities
  - u Only substances, not mixtures
  - u Data sets must be referenced, and be scientifically sound and validated
  - u Global list would be non-binding, but countries will have the option to make it binding through regulatory or legislative processes

## Work Programme, cont.

- u Other issues include pyrophoric gas, work on some other physical hazard issues, and a continuation of the work on practical classification issues.

# Implementation in the European Union

- u European Chemicals Agency (ECHA) recently issued a report on implementation of REACH and CLP in Europe ([http://echa.europa.eu/view-article/-/journal\\_content/title/final-report-of-the-second-reach-enforcement-project-published](http://echa.europa.eu/view-article/-/journal_content/title/final-report-of-the-second-reach-enforcement-project-published)):
- u Only 3% of companies failed to have the SDSs on site. However, 52% of the inspected SDSs showed deficiencies. Despite the high rate of defective SDSs, inspectors noticed an improvement in the formats used and availability of SDSs in comparison to earlier inspections. The findings also showed that 93% of the workers could have access to relevant information from SDSs. However, practice shows that the actual rate was, in fact, lower at 79%.
- u It is clear that the quality of the SDSs and compliance with the notification and registration obligations need to improve. Given the complexity of the new chemicals legislations, industry needs to undergo a learning phase. For that reason, industry should step up its SDS stewardship in order to establish compliance in this area of responsibility. Industry can also find some recommendations in the project report.



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