Hazard Communication Standard and GHS Update

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What I will cover

- GHS update
- RCC update
- Hazard Communication Rulemaking Considerations
- Questions
Ongoing work at the UN
Program of work – 2017-18 Biennium

• Continuation of on going work
  – Small packages
  – Review of Chapter 2.1 (Explosives)
  – Annex 1 to 3
  – Global List
  – Dust Explosion Hazards

• New work items
  – Non animal testing
  – Chemicals under pressure
Small Packages

• Creating examples for labeling kits
  – Multiple examples illustrating how label a box that contain different small containers of hazardous chemicals
Small Packages Scenario 1

Reagent kit for water analysis

Supplier identification (see 1.4.10.5.2(e))

Reagent 1
Signal word (see 1.4.10.5.2(a))
Hazard statements (see 1.4.10.5.2(b))
Product identifier (see 4.10.5.2(d)(ii))

Reagent 2
Signal word (see 1.4.10.5.2(a))
Hazard statements (see 1.4.10.5.2(b))
Product identifier (see 4.10.5.2(d)(ii))

Precautionary statements (see 1.4.10.5.2(b))

Storage conditions
Small Packages Scenario 2

As shown to the right, full label information regarding each inner packaging is contained within the outer packaging.

The sheets of full label information are permanently connected to the inside of the combination packaging using a secure method of attachment (e.g. fold out label adhered to box tie on tag as shown)
Small Packages Scenario 2

Market Kit

Supplier Identifier (see 1.4.10.5.2(a))

Signal Word (see 4.10.5.2(a))

Precautionary Storage Statement (see 1.4.10.5.2(c))

Read full labeling information enclosed
Review Chapter 2.1 (Explosives)

(a) Any changes to the current classification system should not affect the existing transport classification;
(b) Information on divisions should be retained, as they are widely used in many downstream regulations, in particular those addressing storage;
(c) Any new requirements for testing should be avoided;
(d) The consequences of any proposed changes should be weighed in relation to their added value.
# Concept of New Criteria For Chapter 2.1

**Possible new GHS classification system for Explosives as discussed at UN-meetings in July 2017**

<table>
<thead>
<tr>
<th>Category</th>
<th>[1]</th>
<th>[2A]</th>
<th>[2B]</th>
<th>[3A]</th>
<th>[3B]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>n/a</td>
<td>n/a</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Description</td>
<td>Very high hazard</td>
<td>High hazard</td>
<td>Medium hazard</td>
<td>Low hazard</td>
<td></td>
</tr>
<tr>
<td>Criteria</td>
<td>Positive results in Test Series 2 or test 8(b) or 8(c) or intentional explosive, and not exempted article nor Category [1].</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional criteria**

| Division not assigned | Div. 1.1 as configured for transport. | Div. 1.2 as configured for transport. | Div. 1.3 as configured for transport. | Div. 1.5 as configured for transport. | Div. 1.6 as configured for transport. | Div. 1.4X as configured for transport and individually not posing a high hazard | Div. 1.4S as configured for transport and individually not posing a high or medium hazard |

<table>
<thead>
<tr>
<th>Symbol</th>
<th>GH501</th>
<th>GH501</th>
<th>GH501</th>
<th>GH501</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal word</td>
<td>DANGER</td>
<td>DANGER</td>
<td>WARNING</td>
<td>WARNING</td>
</tr>
</tbody>
</table>

| Hazard statement | H200 | H20X | H201 | H202 | H203 | H205 | H206 | H204 | H204 |

**Principles agreed**
- Do not affect transport classifications
- Retain information on Divisions
- Avoid new requirements for testing
- Weigh changes to the added value
Non Animal Testing

(a) Using a step-wise approach, starting with a hazard class to be determined by the informal working group, identify and evaluate, relative to existing accepted *in vivo* test methods upon which the existing GHS classification criteria are based.

(b) For each relevant GHS hazard class and category, assess: all relevant information and determine the appropriate approach (Integrated or tiered evaluation).

(c) Prepare draft amendments and additions to the GHS to facilitate hazard classification using non-animal methods, where appropriate and considering relevant limitations and uncertainties. They should include as appropriate classification criteria, notes, decision logic, tiered evaluation and guidance, and should take into account the needs of all sectors. The proposed changes should provide, so far as possible, a consistent approach across the different hazard classes. If appropriate, suggestions for further developments of non-animal methods should be given.

(d) Report back to the GHS Sub-Committee as appropriate.
Annex 1 to 3

• Workstream 1: to develop proposals to rationalise and improve the comprehensibility of hazard and precautionary statements for users, while taking into account usability for labelling practitioners. This may include proposals to rationalise and clarify ambiguous or unhelpful instructional precautionary statements, such as statements relating to medical response and disposal.

• (Workstream 2: to eliminate inconsistencies in the presentation of precautionary statements in Annex 3, including looking at disparities between the application of precautionary statements for different hazard classes/categories.

• Workstream 3: to consider and address other issues within the Correspondence Group’s terms of reference as they arise.
## Work Plan

<table>
<thead>
<tr>
<th>Work stream</th>
<th>Topic</th>
<th>Priority/complexity</th>
<th>Lead</th>
<th>Proposed start of topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medical response PS (P310-P315)</td>
<td>High; expected to be relatively difficult/complex</td>
<td>USA</td>
<td>January 2017</td>
</tr>
<tr>
<td>3</td>
<td>Precautionary pictogram</td>
<td>High; expected to be problematic</td>
<td>AISE</td>
<td>January 2017</td>
</tr>
<tr>
<td>3</td>
<td>Hand-eye contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>P201 and P202</td>
<td>Medium; expected to be relatively straightforward</td>
<td>UK (DT)</td>
<td>September 2017</td>
</tr>
<tr>
<td>3</td>
<td>Pictograms and notes in Annex 1 Combination of sections 2 and 3</td>
<td>Low; expected to be relatively straightforward</td>
<td>UK (DT)</td>
<td>October 2017</td>
</tr>
<tr>
<td>2</td>
<td>Sensitisation - respiratory</td>
<td>Low; expected to be relatively straightforward</td>
<td>UK (DT)</td>
<td>November 2017</td>
</tr>
<tr>
<td>2</td>
<td>Sub-categorisation</td>
<td>Low; expected to be relatively difficult</td>
<td>UK</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>P501 – Waste disposal PS</td>
<td>Low; expected to be relatively difficult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Combination statements</td>
<td>Low; expected to be problematic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Amendments to headings used for A3.3.4 and A3.3.5 (i.e. Matrix of precautionary statements by hazard/class and category)</td>
<td>Low; expected to be relatively straightforward</td>
<td>UK (DT)</td>
<td></td>
</tr>
</tbody>
</table>
Medical Precautionary Statement

- **High Urgency**
  - **High Seriousness**: Immediately get medical treatment
  - **Low Seriousness**: Seek medical help if exposed or concerned
- **Low Urgency**
  - **High Seriousness**: Seek medical help if you feel unwell
  - **Low Seriousness**: Seek medical help if you feel unwell

OSHA®
Pictogram for keep out of the reach of children

- ASTM icon for liquid laundry packets
- A.I.S.E. Safe Use Icon Keep away from children
- Safe use icon developed by the Japan Soap and Detergent Association (JSDA)
- ISO Keep away from children symbol for use on equipment
Results

A. I. S. E.
Keep Away From Children

GHS09 Environmental

GHS05 Corrosive

GHS07 Exclamation Mark

54%-62% with sufficient understanding of the hazard

negligible critical confusion

only 3% with sufficient understanding of the hazard

- opposite meaning
- incorrect or no idea
- partly correct
- sufficiently correct
- fully correct

Mark opposite meaning if
understanding is insufficient.

A.I.S.E. Keep Away From Children

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

Sufficient understanding of the hazard
Chemicals under Pressure

- Chemicals under pressure
  - Aerosols are different products to chemicals under pressure. Aerosols are by definition non-refillable, have limited capacity and have a relatively low permitted maximum internal pressure. Further the can construction requirements, flammability classification scheme and criteria as well as labelling provisions are different to chemicals under pressure.

- The Sub-Committee agreed that classification and labelling of chemicals under pressure was an issue that needed to be addressed during the next biennium
Three main areas of work, and ongoing activities in support of these areas:

(1) Guidance development to support implementation of the GHS and understanding of interpretation of technical issues and requirements in both Canada and the U.S.

(2) Coordination of common positions and participation in international discussions on the GHS

(3) Maintaining alignment on the GHS implementation
RCC Guidance Update

Three joint guidance documents being prepared by HC and OSHA

1) Guidance document on labelling requirements

This document will outline the labelling requirements for hazardous products under the HPR and the HCS 2012.

Variances are identified (e.g., language requirements). Notwithstanding these variances, it is still possible to meet the requirements of both countries using a single label.
2) Guidance document on labelling requirements for Hazards Not Otherwise Classified (HNOC), Physical Hazards Not Otherwise Classified (PHNOC) and Health Hazards Not Otherwise Classified (HHNOC)

Under the HPR, for hazardous products classified as PHNOC or HHNOC, specific information elements are required on the label.

Under the HCS 2012, no label elements are required for HNOC.

This document will provide guidance on label elements that would be acceptable in both countries for products that are HNOC/ PHNOC/HHNOC.
3) Guidance document on allocation of authorities

This document will provide an overview and comparison of how Canada and the U.S. allocate authorities relating to hazardous products used in workplaces.
Preparation for HCS Update

The standard that gave workers the right to know, now gives them the right to understand
Principles & Assumptions

• As with HCS 2012, OSHA plans to modify only the provisions of the HCS that must be changed to align with the GHS
  – The basic framework of the HCS will remain the same
    • Chemical manufacturers and importers are responsible for providing information about the identities and hazards of chemicals they produce or import
    • All employers with hazardous chemicals in their workplaces are required to have a hazard communication program, and provide information to employees about their hazards and associated protective measures
  • OSHA will maintain or enhance the overall current level of protection of the HCS
Purpose of Future HCS Rulemaking

- Maintain alignment with GHS
- Address issues identified during implementation of HCS 2012
- Identify issues of concern for those complying with WHMIS 2015
Comments so Far

• Cautiously Improve alignment with Canada
  – Concentration ranges/CBI
• Visit issues with small packages
• Distribution issues
  – Relabeling at time of shipment versus “release for shipment”
• Maintain alignment with EU
• Cut-off values variances
Questions to consider

• How the change will effect your company or Industry?

• What are the burdens your industry/company expects?

• Please provide information on potential feasibility issues
  – Technical – can not physically be done
  – Financial
  – Please provide examples/costs associated with issues
Special Thanks
Questions?
OSHA Information

Websites:
• HCS 2012 Webpage
  http://www.osha.gov/dsg/hazcom/index.html

Contact information:
• 202-693-1950