# GHS – An Industry Perspective

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# GHS...the early years

- **Inception at UNCED conference in 1992**
  - Good concept, especially for countries without existing hazard classification/communication regulation, but not much visible effort to make it happen
  - Early on, heard legislators comment…"adopt our current legislation and we'll be happy"…but little effort to reach consensus
    - As a result, progress minimal until the turn of the century, when we began to see more serious effort at harmonizing/consensus building
  - Approval by UNCETDG-GHS in Dec. 2002
  - Final approval by UNECOSOC in July 2003
- **Followed by a waiting period…who is going to be first to adopt???**

# GHS…Japan in 2006

- **In May, ’06 we get the word…Japan will adopt and compliance expected by Dec. 1 ’06**
  - A bit of a fire drill…
    - GHS, although around for 3 years, most of our businesses were not fully aware of its’ existence – required quick “GHS 101” training…just the bare bones
    - Luckily, scope only included products containing any of the 100 ISHL-regulated chemicals at a conc. 1% or greater
    - Additionally, only GHS labels required and not SDS…so we treated this like a pilot exercise
  - Nonetheless, we had 6 months to comply…
    - Upon closer exam, Japanese adoption not fully aligned with UN Purple Book – overlaid GHS on top of existing legislation (FSL, PDSCL, ISHL, PRTR, etc.)…a sign of things to come???
    - The clock is ticking…

# GHS…Japan implementation plan

1. **Obtain a list of all DuPont products sold into or manufactured in Japan**
2. **Break down products into their components**
3. **Compare component list and their concentrations to 100 ISHL-regulated chemicals to identify our impacted products**
4. **Begin GHS classification of product components**
   - Reviewed and considered Japan & New Zealand provided classifications versus self-classification
   - Because of limited number of components, we opted to self-classify…but this did take longer than expected
5. **Classify the products using EH&S GHS rule set**
6. **Generate draft GHS labels for business review**
   - As mentioned previously, this required some GHS training which added time
7. **Obtain business approvals & generate actual packaging labels for placement on products by Dec. 1…then we rested!**

# GHS…post Japan

- **New Zealand and Korean implementations right around the corner**
  - Both requiring GHS compliance by June 30, 2008, albeit NZ only requiring SDS compliance
- **What we are doing to prevent another fire drill…**
  - Take the same corporate approach we used to address REACH and leveraged the same structure and staffing…
  - Create GHS awareness across DuPont at all levels for management – get GHS on all regulatory meeting agendas
  - Commissioned a 5-phase corporate project which allowed us to secure resources and funding across Corp. SHE, Haskell Labs, Businesses to work on GHS…
    - Phase 1- Enactment:

Monitor proposed implementation dates and draft standards

- Look at Transitional periods/phased implementation

Review standards and provide feedback to authorities

- Emphasize consistency with UN GHS
- Discuss omissions, errors, unwanted additions

Communicate with regional and global business through DuPont GHS steering team

Data used to forecast spending & project timings

# GHS…post Japan (cont.)

- **Phase 2 – Impact Analysis:**

Generate order extract for each impacted country

Match stock ID's to products in SAP EH&S

Generate list of components for impacted products

Business review for completeness

Compile available "official" classifications for product components and submit to Haskell for review

  - (Official classifications checked for consistency between countries and with available tox data)

- **Phase 3 – SAP EH&S System and Data:**

Work with Technidata to develop country specific expert rule, if required

Develop local template versions for SDS and label outputs

Loading/testing of rules/templates

Haskell delivery of product component classifications

Load Haskell reviewed component classifications and supporting data

# GHS…post Japan (cont.)

- **Phase 4 – Business Preparation:**

  Business to nominate competent GHS SDS & Label approvers

  Approvers to gain access to SAP EH&S

  Approvers to complete GHS training package

- **Phase 5 – Document Generation and Review:**

  AP team run country GHS classification rule on impacted products

  AP team generate SDS and label outputs

  Impacted businesses review and release of SDS and labels

  Distribution of SDS and apply labels, as appropriate

# GHS…A few immediate implementation issues

- **To date, a rather non-harmonized adoption approach when compared to the Purple Book… just a few examples…**
  - Japan overlaid GHS on existing legislation
  - New Zealand adopted a unique classification coding scheme (e.g. Acute Tox Cat 1 = 6.1A), but there is not always a 1:1 match
  - NZ added soil, vertebrate, and invertebrate terrestrial ecotox as environmental endpoints – to be considered supplemental info??
  - GHS includes provision for the "Building Block" approach, allowing countries to adopt portions of GHS, usually by business sectors, and not the 'Full Monty', although countries are encouraged to adopt all hazard categories within a hazard class for consistency purposes – not always the case
  - Also includes provisions for "supplementary information" on labels which can make labels "non-sharable" across multiple countries
  - GHS remains unsettled…a bit of a moving target,
    - *Revision 1 of Purple Book issued in 2005*
    - *Revision 2 currently available*
    - *makes it difficult for early implementing countries to provide impacted industry with clear compliance guidance*

# GHS…A few immediate implementation issues (cont.)

**• Inconsistent hazard classification at the pure substance level which is the foundation for classifying our products…**

- Japan, New Zealand, EU converted values differ – largely due to inconsistencies in the base tox and ecotox data…significant effort required to review these and select the "best" one or self-classify
- Japan & New Zealand classifications are optional, but EU Annex I to Annex VI conversion will be mandatory (at least for CMR and sensitizers)…need further review as they are based on old data
- DuPont stores > 6,000 pure subs in our EH&S db…vast majority are product components that eventually require GHS classification
  - Don't have internal resources to self-classify
  - Govt. provided classifications – bit of a crap shoot
  - Must outsource
- Ideal solution from our perspective…UN-sanctioned db for all pure subs
  - Saves DuPont and all of industry time & resources to self-classify
  - Places all companies on level playing field when classifying their products
  - Enhances the chance for global harmonization…what a novel idea!!!

# GHS…Some downstream concerns…

- **Cost to revise, regenerate, review, and approve GHS SDS & labels… even with electronic systems these semi-automated processes will still cost $$$**
- **Educate and train our global employees (and customers) on GHS hazard classifications, new symbols, etc.**
  - See this as a major issue for the US as GHS brings forth wide sweeping changes
    - Hazcom consultants and training companies are beginning to salivate!
- **Change in flammable definition (100F → 140F)… how might this impact warehouse storage and transport costs?**
  - NFPA making adjustment to classify these materials as Combustible II, but just don't know how this will play out yet
  - Will material haulers increase costs due to this change in definition?
- **How will the use of standard GHS Hazard & Precautionary phrases impact Product Liability in the US?**
  - Added liability because the H & P phrases are not as explicit as we are accustomed to (i.e. Failure to Warn)
  - Reduced liability because all companies/regions are using the same H & P phrases

# GHS…In summary…

- **As previously mentioned the overall concept of GHS remains a sound solution to…**
  - enhance worker safety
  - ease the burdens of international trade
- **There are recognized time and resource costs related to making any system changes and GHS is proving to be no exception**
- **Perhaps a globally sanctioned list of pure classifications could be developed to help foster harmonization**
- **DuPont and all of industry would appreciate a more consistent approach to country implementations so the true benefits of GHS can be realized**


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