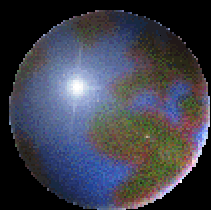


US EPA ARCHIVE DOCUMENT



*The Globally Harmonized  
System of Classification and  
Labelling of Chemicals  
(GHS)*

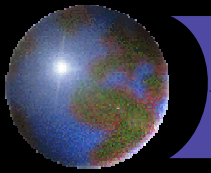
**Mary Frances Lowe**

**Deborah McCall**

**Pesticide Program Dialogue Committee**

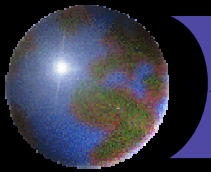
**Arlington, Virginia**

**October 29-30, 2003**



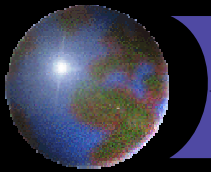
# *What is the GHS?*

- A common and coherent approach to defining and classifying hazards, and communicating information on labels and safety data sheets.
- Target audiences include workers, consumers, transport workers, and emergency responders.
- Underlying infrastructure for establishment of national, comprehensive chemical safety programs.



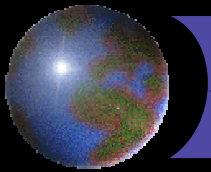
## *Where we are now:*

- UNCED mandate (1992)
- Tripartite negotiations for over a decade completed in December 2002
- UN ECOSOC approval in July 2003



# *Scope of the GHS*

- Harmonization of major existing systems for chemicals in transport, in the workplace, pesticides and consumer products—*without lowering the level of protection afforded by those systems*
- Classification based on intrinsic properties/hazards, not risk
- Scope covers all chemicals
- Consistent with U.S. regulatory framework



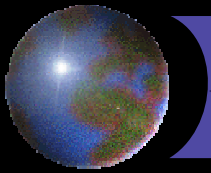
# *GHS Goals*

- To promote safer transport, handling and use of chemicals world wide
- To facilitate international trade in chemical products by promoting greater consistency in regulatory requirements
- To reduce need for testing and evaluation
- To assist countries in developing strategies for sound management of chemicals



# PHYSICAL HAZARDS (3)

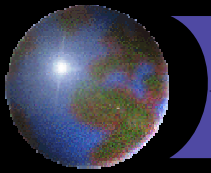
EXPLOSIVES	FLAMMABLE GASES
FLAMMABLE AEROSOLS	OXIDIZING GASES
GASES UNDER PRESSURE	FLAMMABLE LIQUIDS
FLAMMABLE SOLIDS	SELF-REACTIVE SUBSTANCES
PYROPHORIC LIQUIDS	PYROPHORIC SOLIDS
SELF-HEATING SUBSTANCES	SUBSTANCES which, in contact with water, emit flammable gases
OXIDIZING LIQUIDS	OXIDIZING SOLIDS
ORGANIC PEROXIDES	CORROSIVE TO METALS



# *Health Effects*

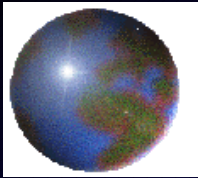
- Acute toxicity/lethality (oral, dermal, inhalation)
- Skin corrosion/irritation
- Serious eye damage/eye irritation
- Respiratory sensitization and skin sensitization
- Germ cell mutagenicity





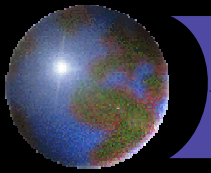
## *Health Effects (continued)*

- Carcinogenicity
- Reproductive and developmental toxicity, lactation effects
- Specific target organ/systemic toxicity (single and repeated exposure)



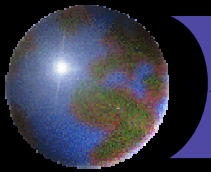
# GHS SYMBOLS





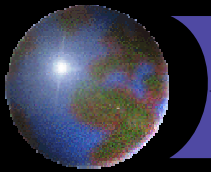
# *What should be harmonized*

- Classification criteria for physical hazards, health hazards, and aquatic toxicity, for chemical substances and mixtures
- Certain standardized label elements: hazard pictograms, use of two signal words (danger and warning), and hazard statements for each hazard class and category
- [Product identifiers and precautionary statements]
- Format and contents for Safety Data Sheets



# *What does not need to change to be consistent with the GHS*

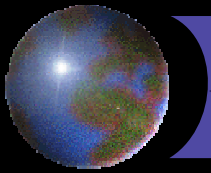
- Supplemental information
- Testing methods and data requirements
- Use of risk-based labeling for chronic effects for consumer products in the consumer use setting
- Scope of hazards covered by national systems (“building block” approach)
- Downstream effects



# *General Implementation*

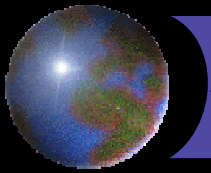
## *Expectations*

- Voluntary international system—no binding treaty obligations on countries
- Intent is that countries with existing systems will harmonize them to be consistent with the GHS and
- Countries that do not have systems will adopt GHS as their basic system
- To extent that countries adopt GHS into their systems, binding regulatory changes for industry



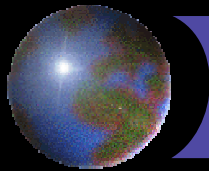
# *Timing*

- No international implementation schedule
- IFCS, WSSD goal of 2008; APEC goal of 2006
- Different systems/sectors likely to require different time frames
- Steps to avoid disruption will need to be considered in transition from old to new labels



## *Next steps*

- Analysis of existing policies and identification of differences between them and GHS, including “downstream effects”
- Extensive internal and external outreach to raise awareness and seek input
- Coordination with other agencies to maximize harmonization within the U.S. government
- NAFTA co-ordination will also be key
- OPP has formed internal working group co-chaired by RD and FEAD



# *Anticipated Benefits of Harmonization*

- Countries, international organizations, chemical producers and users of chemicals all benefit.
  - Enhance protection of humans and environment.
  - Facilitate international trade in chemicals.
  - Reduce need for testing and evaluation.
  - Assist countries and international organizations to ensure the sound management of chemicals.