GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS/GHS

a/k/a HazCom 2012: What It All Means
GHS – MAJOR CHANGES

• A WORLDWIDE SYSTEM WHICH WILL HARMONIZE CONTAINER LABELING, CLASSIFICATION AND HAZARD IDENTIFICATION OF CHEMICALS, AND SAFETY DATA SHEET FORMAT AND CONTENT

  – Employee training to become familiar with new label elements and safety data format is to be completed by 12/1/13
GHS - LABELS

• MANUFACTURERS AND DISTRIBUTORS MUST CREATE AND USE UPDATED CONTAINER LABELS ON THEIR PRODUCTS
  – Labels will include all pertinent information, such as product and supplier info, hazard signal word, pictograms, and precautionary statements
  – Our suppliers have until 6/1/15 to be in compliance with this change
GHS – HAZARD CLASSIFICATIONS

• HAZARD CLASSIFICATION WILL BE ASSESSED BY MANUFACTURERS AND SUPPLIERS
  – EACH MATERIAL WILL FALL INTO A DEFINED HAZARD CLASS WITH PRE-DETERMINED PRECAUTIONARY STATEMENTS ISSUED ACCORDING TO THAT EVALUATION
  – THIS IS SOMEWHAT SIMILAR TO THE HAZARD RATING NUMBER SYSTEM; EVEN THOUGH THE MODIFICATION SUGGESTS A REVISED NUMBERING SCALE OF 1-5 (WITH 1 BEING THE MOST HAZARDOUS AND 5 BEING THE LEAST), THE NFPA HAS NOT ADOPTED THIS CHANGE AND NEITHER WILL PURDUE. WE WILL CONTINUE TO USE THE SAME NUMBERING SYSTEM AND SECONDARY CONTAINER LABELS WE HAVE BEEN (NFPA 704 DIAMOND LABELS FOR SECONDARY CONTAINERS).
**GHS PICTOGRAMS**

- Nine pictograms (featured on the following slide) will be utilized in identifying hazards of all chemicals.
- Each chemical will have at least one pictogram — and in some cases, multiple pictograms — to visually convey the hazards associated with it.
- We need to be familiar with the meaning(s) of each pictogram. Labels and safety data sheets will not always include that information, so a certain level of understanding by the end users will have to be achieved and maintained. REM will provide pictogram reference cards to post in work areas to help people become familiar with these pictograms and their meanings.
GHS - PICTOGRAMS

HCS Pictograms and Hazards

**Health Hazard**
- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

**Flame**
- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self Reactives
- Organic Peroxides

**Exclamation Mark**
- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

**Gas Cylinder**
- Gases Under Pressure

**Corrosion**
- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

**Exploding Bomb**
- Explosives
- Self-Reactives
- Organic Peroxides

**Flame Over Circle**
- Oxidizers

**Environment (Non-Mandatory)**
- Aquatic Toxicity

**Skull and Crossbones**
- Acute Toxicity (fatal or toxic)
GHS – SAFETY DATA SHEETS

STANDARD SDS FORMAT WILL INCLUDE THESE 16 SECTIONS:

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

OSHA will not enforce sections 12-15 as they do not have jurisdiction over these categories; these would fall under EPA or other environmental regulatory agencies.
GHS – SAFETY DATA SHEETS

- MATERIAL SAFETY DATA SHEETS (MSDS) WILL NOW BE KNOWN AS SAFETY DATA SHEETS (SDS)
  - EVERY SDS WILL HAVE THE SAME 16 SECTIONS IN THE SAME ORDER, REGARDLESS OF ISSUER
  - EVERY SECTION WILL HAVE THE SAME SAFETY INFORMATION, I.E. SECTION 4 WILL **ALWAYS** RELAY FIRST AID MEASURES; SECTION 8 WILL **ALWAYS** SHOW PPE REQUIREMENTS, ETC.
  - KEEP CURRENT MSDS AVAILABLE UNTIL NEW SDS ARE FOUND; ARCHIVE OLD MSDS AS NEW SDS ARE COLLECTED; WE HAVE 3 YEARS (UNTIL JUNE, 2016) TO GET ALL UPDATED SDS ON FILE
GHS – WHAT WON’T CHANGE...

• WE STILL HAVE TO KEEP CHEMICAL INVENTORIES
• WE STILL HAVE TO MAINTAIN SAFETY DATA SHEETS
• WE STILL HAVE TO TRAIN **NEW** PEOPLE ON THE POTENTIAL HAZARDS OF WHAT THEY WILL BE WORKING WITH
• WE STILL HAVE TO MAINTAIN OUR RECORDS FOR 30 YEARS, PER OSHA
GHS – WHAT IT IS...OR NOT

• THIS IS NOT A NEW OSHA STANDARD; IT’S A REVISION TO THE EXISTING OSHA HAZARD COMMUNICATION STANDARD/RIGHT-TO-KNOW LAW

• THE NEXT THREE YEARS WILL BE CONSIDERED A TRANSITION PHASE AS ALL GROUPS, I.E. MANUFACTURERS, EMPLOYERS, AND END USERS, WORK TO MEET THE NEW REQUIREMENTS OF THE REVISED STANDARD

• MUCH OF WHAT WILL HAPPEN OVER THE COURSE OF THE NEXT FEW YEARS IS RELIANT ON THE SPEED AT WHICH OUR MANUFACTURERS DO THEIR PART
  – CREATING NEW LABELS AND SDS
GHS – ACTION PLAN

• LABELS:
  – Chemical containers, bottles, etc. will begin – or may already have begun - to arrive from manufacturers or distributors with the newly-formatted labels. These new labels will include more information than ever before. Read them thoroughly to get used to the new format and content, even if it’s not the first time you’ve used the product.
GHS – ACTION PLAN

• PICTOGRAMS:
  – Be sure you understand the meanings of the pictograms that will appear on the labels. Refer to this presentation slide #6, the laminated card that REM will have available, or an online resource, such as the OSHA website (www.osha.gov), to check if you are unsure of what something means.
GHS – ACTION PLAN

• SECONDARY CONTAINER LABELING:
  – Continue to include the name of the product and the hazard rating number information on any secondary bottles, cans, vials, etc. You may continue to utilize the NFPA 704 diamond symbol/label to indicate the ratings for each material.
  – Alternative labeling systems such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS) are permitted for workplace containers. However, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms.
GHS – ACTION PLAN

• SAFETY DATA SHEETS (SDS):
  – You must keep any MSDS you already have.
  – Watch for new GHS-compliant (16-section) SDS to arrive.
  • They may come from the manufacturer or distributor with a shipment of the products you order OR
  • You may go online or contact the manufacturer yourself to get it

Once you have the new GHS-compliant version of the SDS - you may create an archive file of MSDS and begin to keep an active file of the new SDS to go along with your current chemical inventory. Remember, new SDS may not be available right away as manufacturers still have a couple of years to create new SDS and have them available.
GHS – ACTION PLAN

• TRAINING - FOR SUPERVISORS OR WORK AREA/DEPARTMENTAL DTIs AND TRAINERS:
  – Awareness-level training of the GHS modification to the Hazard Communication standard – or HCS 2012 - must be conducted and documented with ALL employees by 12/1/2013.
  – REM has (DVD) videos, PowerPoint presentations, and electronic training options available to assist you in meeting this requirement.
GHS – ACTION PLAN

• REM WILL CONTINUE TO DO EMPLOYEE TRAINING TO FAMILIARIZE EVERYONE WITH THE CHANGES TO THE HAZCOM PROGRAM THROUGHOUT THIS YEAR AND BEYOND

• QUESTIONS? CONTACT STEPHANIE RAINEY; SLRAINEY@PURDUE.EDU; 494-3152.