

Safety Warning Labels and the Global Harmonization of America

Rick Gleason, CIH, CSP
rgleason@uw.edu
Sept 27, 2018



Teach your kids and grandkids about safety



New Label Requirements

GHS Label

Workplace Label

Chemical Name
CAS# 55-55-5

Health Hazards / Target Organ Effects
Irritant to: Eye, Respiratory system and mucos membranes, Liver, Kidney, Eyes, Skin, Lungs and/or Respiratory System

Physical Hazards
Flammable Liquid

Route of Entry: Inhalation, Skin, Eye, Ingestion

Fire →

Instability ↓

Health ↑

Special ←

XYZ Chemical, 234 E. 3rd St; Murray KY 42071 227.777.6565

GHS Chemical

Danger!
Toxic If Swallowed, Flammable Liquid and Vapor

Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Keep away from heat / sparks / open flame - No smoking. Wear protective gloves and eye / face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in a cool / well ventilated place.

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor / physician. Rinse mouth.

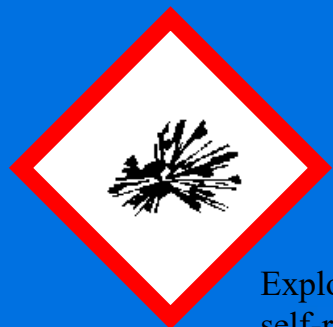
In case of fire, use water fog, dry chemical, CO2 or "alcohol" foam.

XYZ Chemical, 234 E. 3rd St; Murray KY 42071 227.777.6565

- Old OSHA Standard
 - Material identity
 - Hazard warnings
 - Supplier information

- Updated OSHA GHS Standard
 - Product identifier
 - Signal word
 - Hazard statements
 - Precautionary statements
 - Pictograms
 - Supplier information
 - Supplemental information

GHS Pictograms



Explosives,
self-reactives,
organic peroxides



Gases under pressure



Flammables, pyrophoric,
Self-heating, emits flam gas,
self-reactive,
organic peroxides



oxidizers



Acute toxicity,
fatal or toxic



Skin corrosion/burns,
eye damage
corrosive to metals



Carcinogen, mutagenicity,
Repro toxicity, resp sensitizer,
target organ toxicity,
aspiration toxicity



Irritant, skin sensitizer,
acute toxicity, narcotic
effects, resp tract irritant,
haz to ozone layer



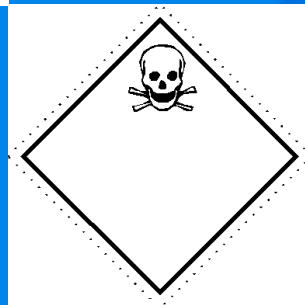
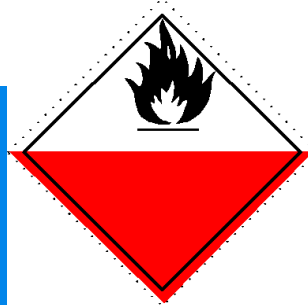
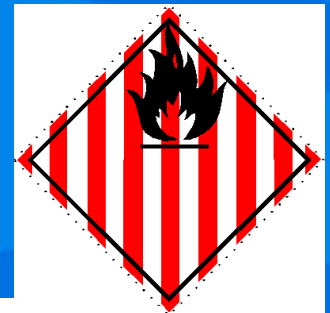
Aquatic toxicity

Signal Words

“Danger” or **“Warning”**

- Used to emphasize hazard and discriminate between levels of hazard

Transport Pictograms



Pictograms Not Incorporated Into GHS

Class 6.2



Infectious
substances

Class 7



Radioactive material



Class 9



Miscellaneous
dangerous
substances and
articles

How Well Do You Know Your Placards and GHS Labels?

Take this Exam

Rick Gleason, CIH, CSP
rgleason@u..edu

1. Question Authority

2. Irritant

3. Skin Sensitizer

4. Acutely toxic or harmful

5. Respiratory Hazard

6. I am Surprised

7. You did What?

8. Watch Out!



1. Carcinogen

2. Reproductive Toxin

3. Mutagen

4. You have a starfish on your chest.

5. Alien Life form

6. Stretched to the Limit

7. Fragmentation Hazard



1. Fish should not climb trees

2. Toxic to the Environment

3. Aquatic Hazard

4. Tsunami Aftermath

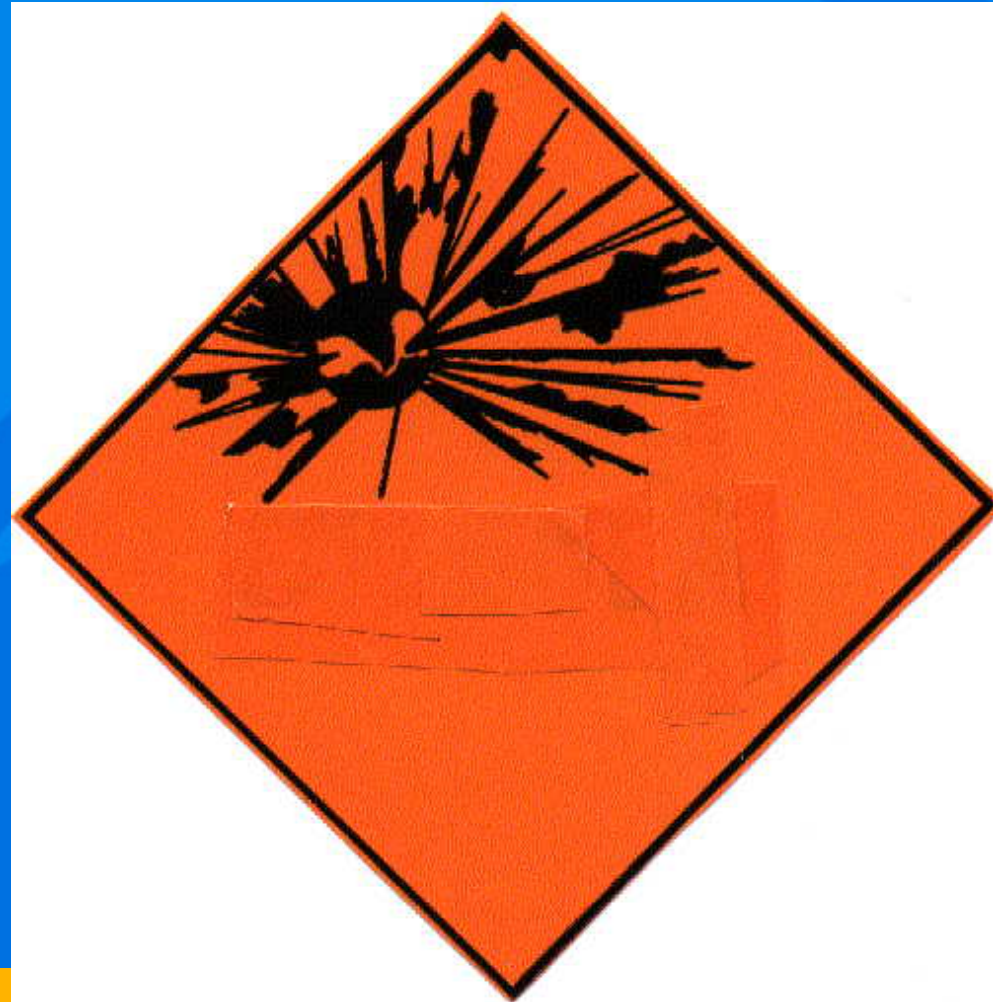
5. Evolution

6. Fish Out of Water Warning



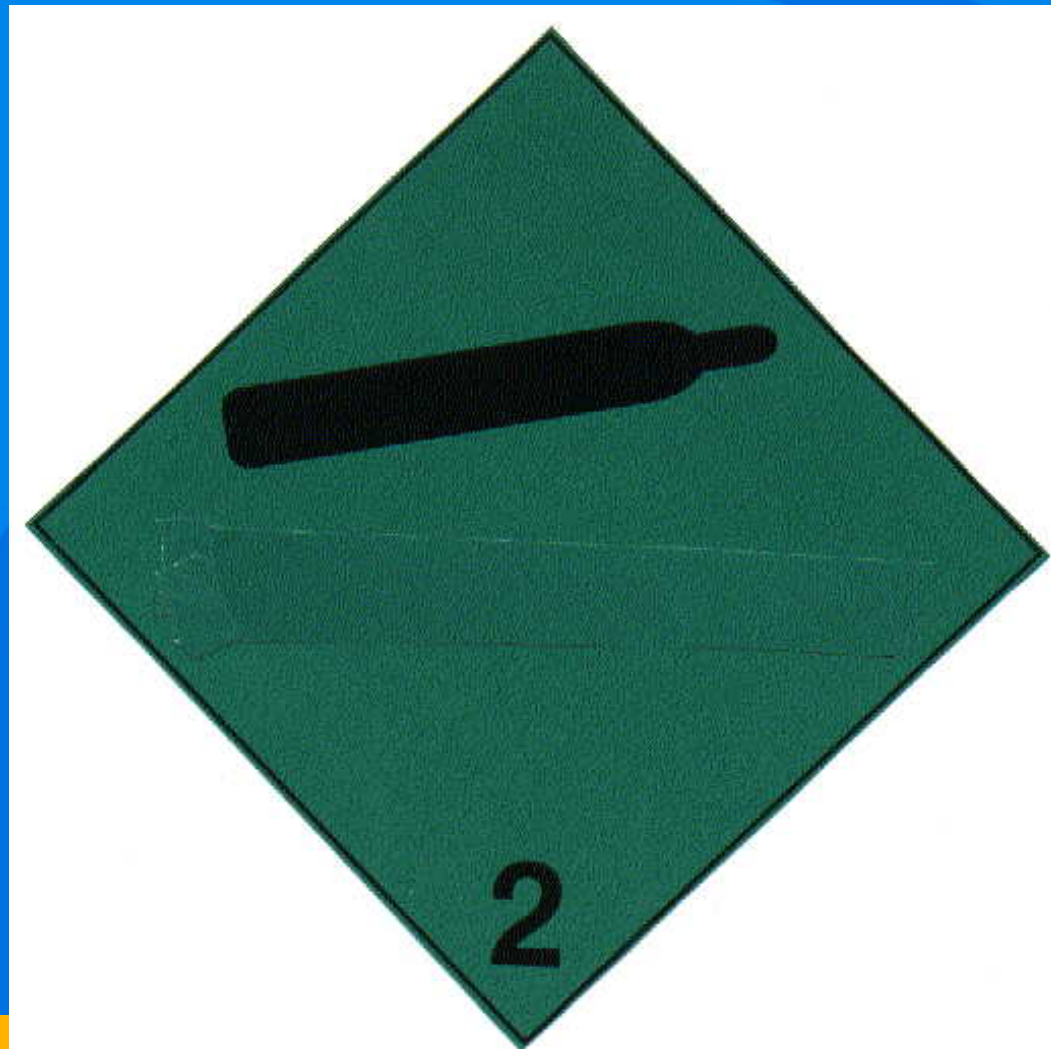
Placard A

- 1. Caution! Soccer balls may explode when kicked
- 2. Explosives consignment
- 3. Hunting with hand grenades permitted
- 4. Do not drip sauce bottles at this checkpoint
- 5. Interplanetary war in progress



Placard B

- 1. Short canoe paddle zone
- 2. Beware of low flying missiles
- 3. Enemas at work
- 4. Big reduction on broken rolling pins
- 5. Compressed gas consignment



Placard C

- 1. Beware of powerful updrafts
- 2. Punk haircuts permitted
- 3. Jump through flaming hoop on your way out
- 4. Oxidizer



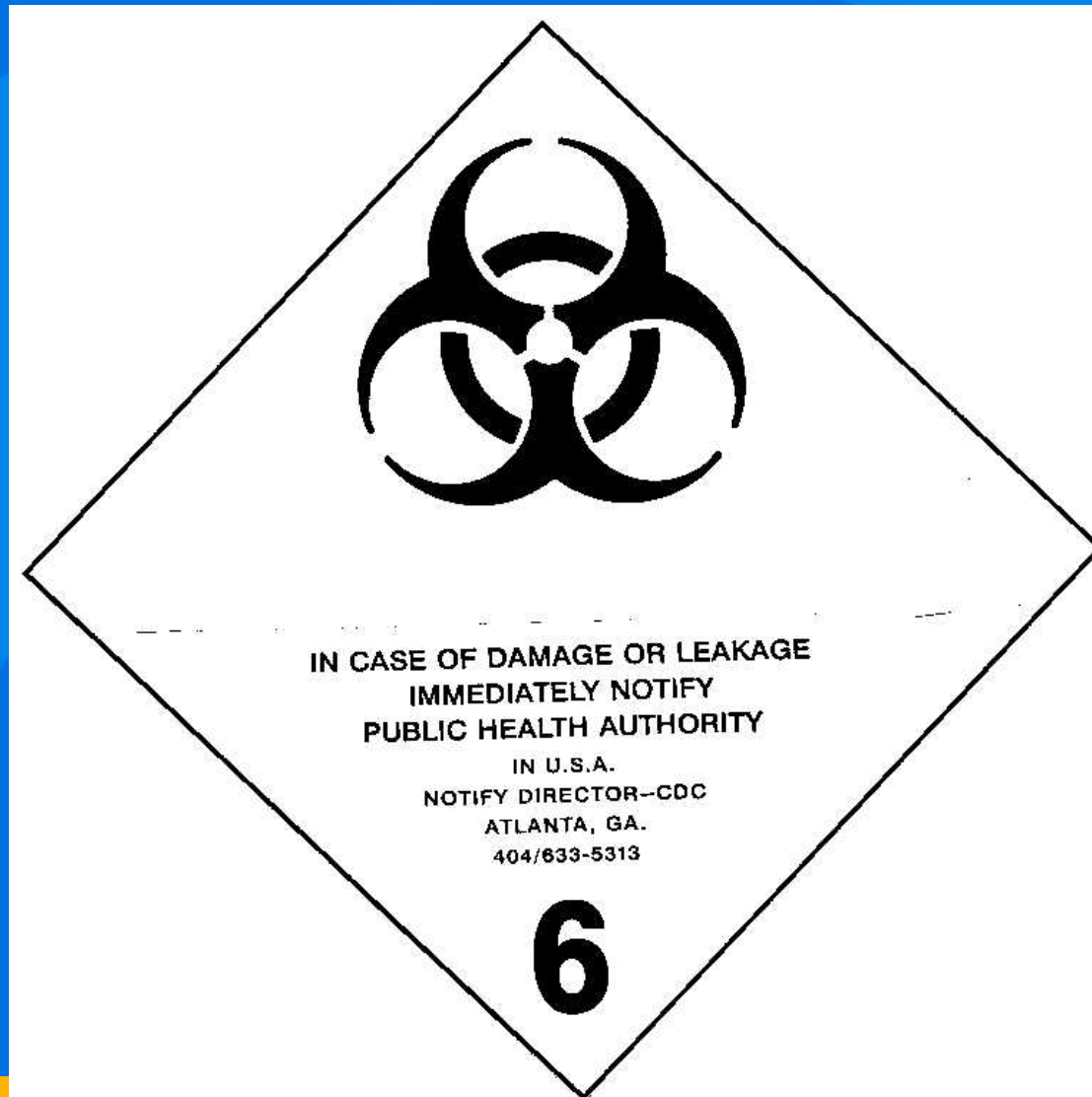
Placard D

- 1. Campfires permitted
- 2. Never Light Candles in the Middle
- 3. Flammable Gas
- 4. Welcome to the Bronx
- 5. WTO Convention in Progress



Placard E

- 1. Voodoo Practiced in Area
- 2. Infectious Substances
- 3. Crop Circle Investigation Underway
- 4. Junior Olympics in Progress



Placard F

- **1. Dead bodies aboard vehicle**
- **2. Pirates in Area**
- **3. Beware of Cannibals**
- **4. Toxic/Poisonous Materials**
- **5. Please Leave Your Old Bones Here**
- **6. Welcome to Hanford**



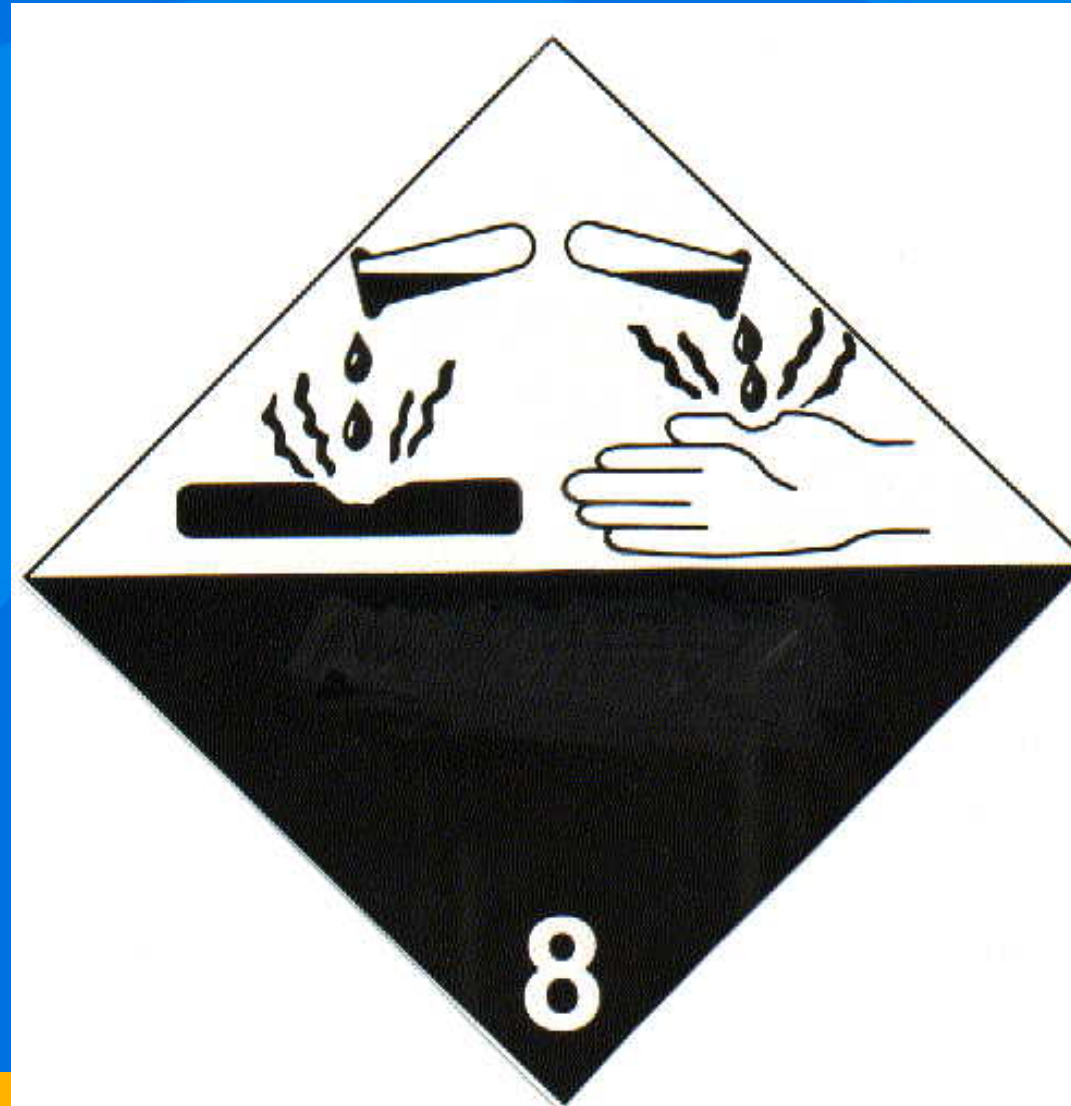
Placard G

- 1. Do not stand in front of aircraft with spinning propellers
- 2. Target Practice Zone
- 3. Radioactive Materials
- 4. Broken Record Disposal Area

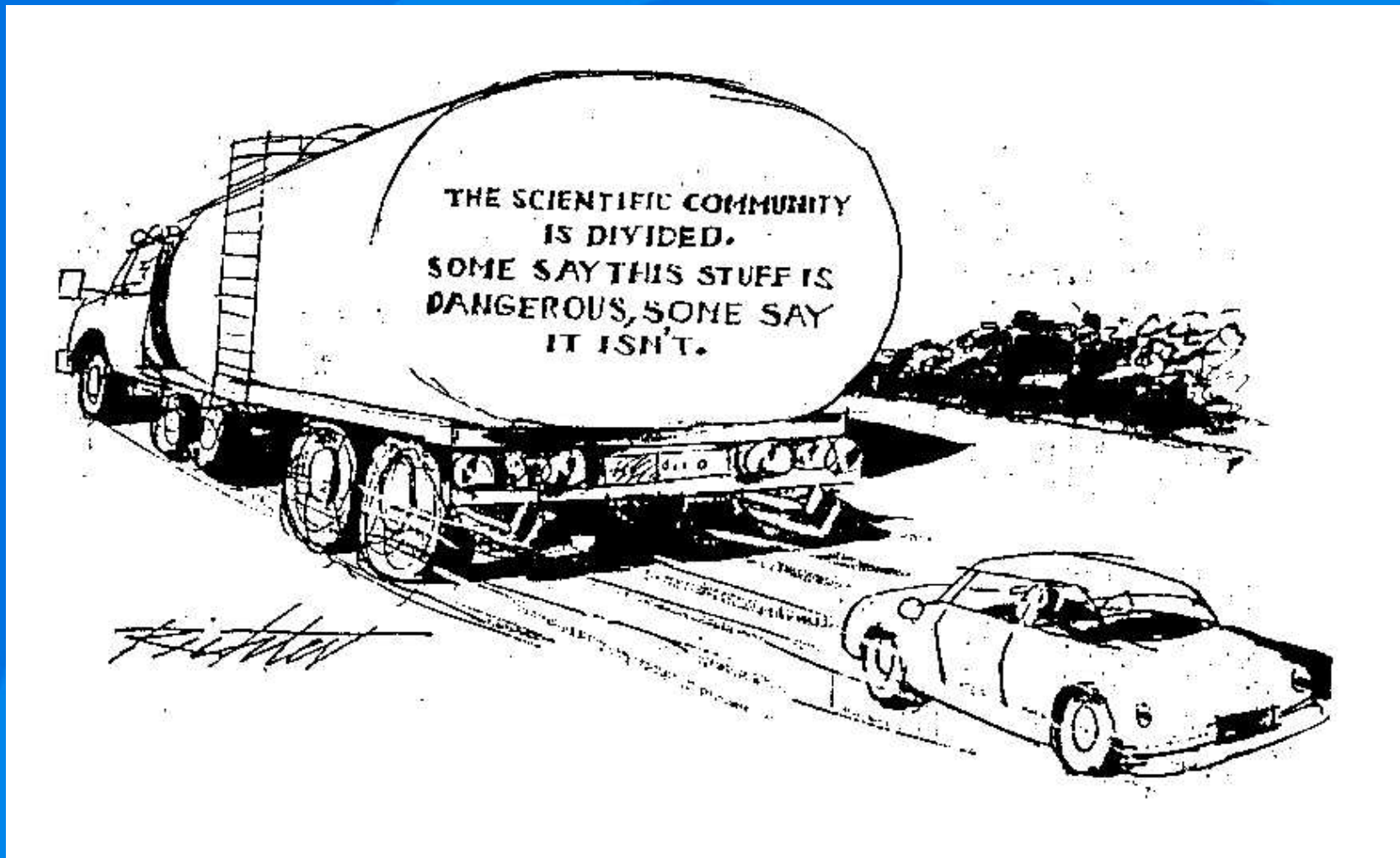


Placard H

- 1. Do not shake hands with a piece of steel while having acid dumped on you
- 2. Those Caught Stealing Metal Will be Severely Punished
- 3. Corrosive Materials
- 4. Not For Hands That Do Dishes



New Scientific Placard

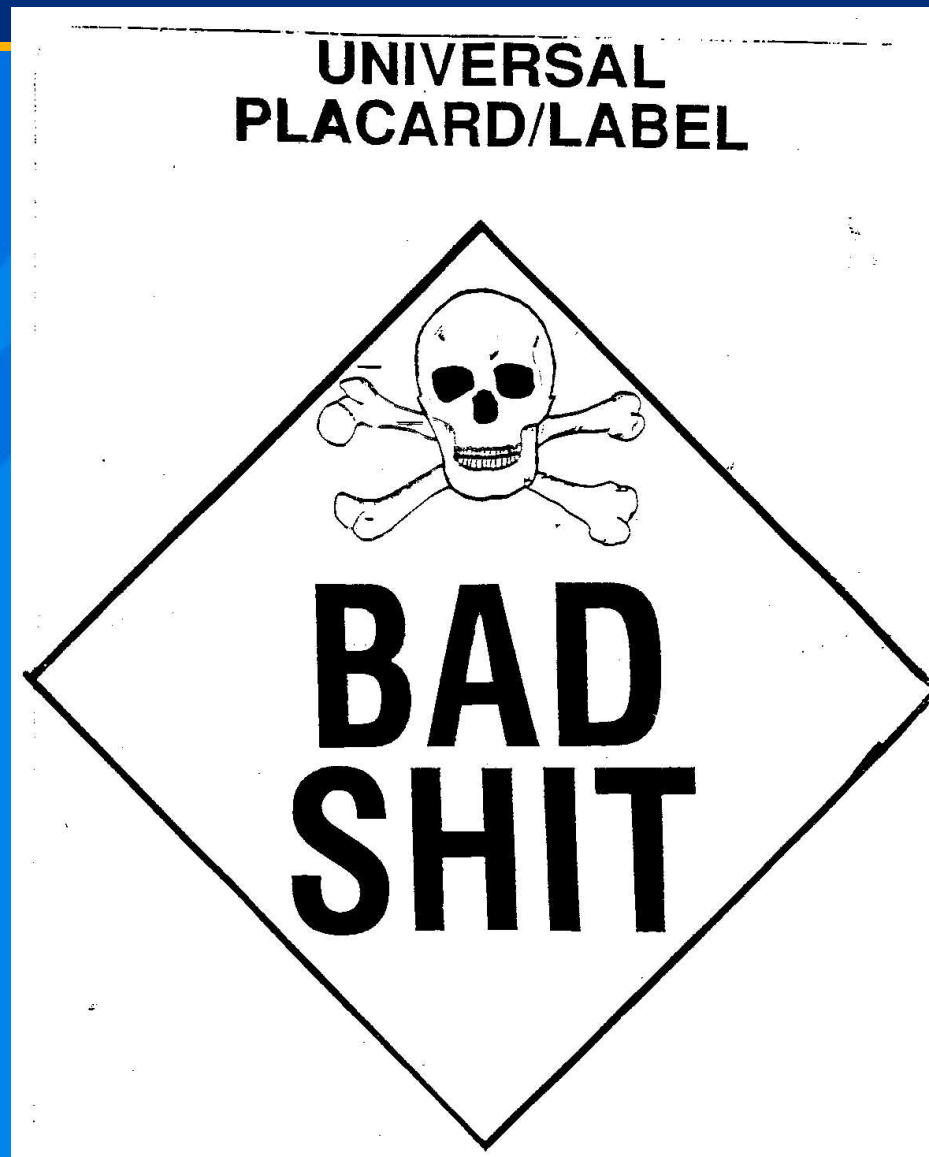




Warning:

Intended for
Mature Audiences
only

Most Widely Recognized Label



Product J

(abc chemical)



Danger

Fatal if swallowed
Causes skin irritation

Precautions:

Wear protective gloves.

Take off contaminated clothing and wash before reuse.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Store locked up.

Dispose of contents/containers in accordance with local regulations.

IF ON SKIN: Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water.

IF SWALLOWED: Immediately call a Poison Center or
doctor/physician. Do not induce vomiting.

ABC Chemical Co., 123 Anywhere St., (123) 456-7890

See the SDS for more information

GHS

Globally Harmonised System

New Classification and Labelling of Chemicals

Physical Hazards



Explosive



Flammable



Gases under
pressure



Oxidising



Corrosive

Health Hazards



Corrosive



Harmful / Irritant



Toxic



Health

Environmental Hazards



Dangerous to the Environment

For more information visit:

www.hse.gov.uk/ghs

www.unep.org

The GHS pictograms above replace the following :





Top 10 Reasons you Can Tell Your OSHA Inspection is Going Badly

Rick Gleason, CSP, CIH

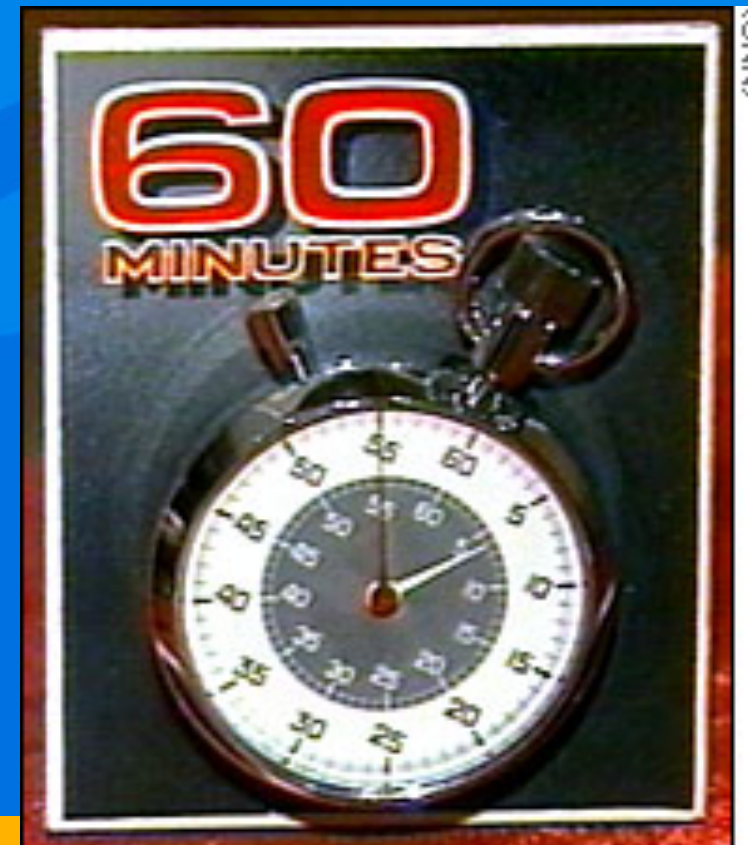
- 1. OSHA sets up Temporary Housing in your Parking Lot



- 2. The Compliance Officer mutters, “This is unbelievable” each time they enter a new area.



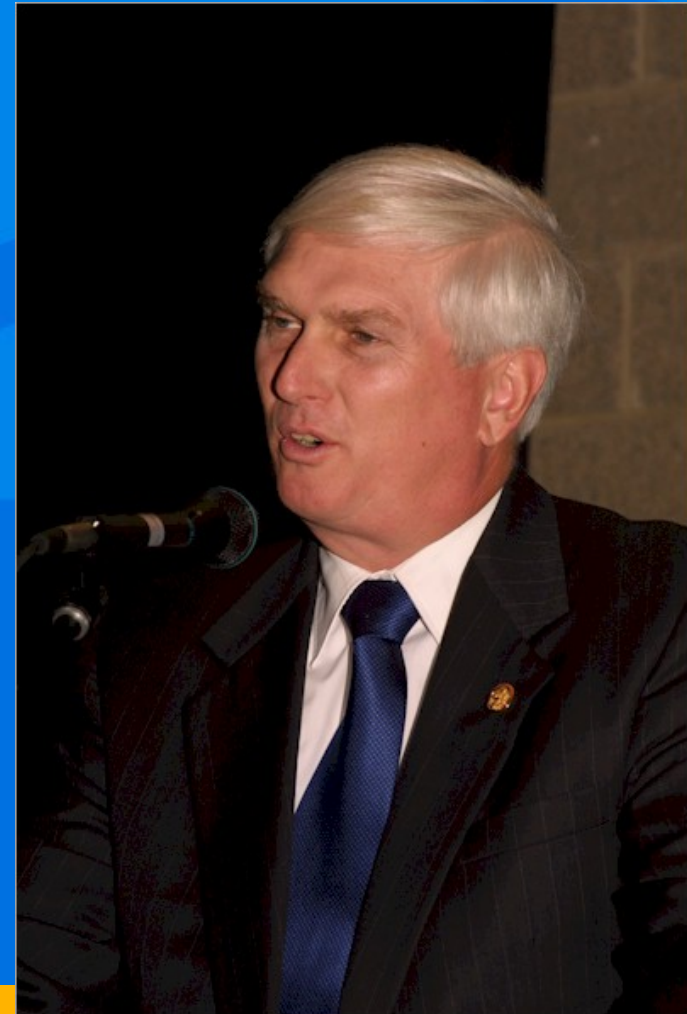
- 3. OSHA calls in a professional film crew to document conditions. The crew is from “60 Minutes”



- 4. The Compliance Officer insists on wearing Level A in your chemical area, while your employees are in jeans and T-Shirts.



- 5. The Congressman you call for help will not return your call, but he does return you campaign contributions.



- 6. The Compliance Officer begins the opening conference with the following, “You have the right to remain silent....”



- 7. The Compliance Officer asks you a specific question about a report in your files, but you haven't turned over any files yet.



- 8. The Compliance Officer knows each of your employees by their first name.



9. Anne Soize, the new head of DOSH conducts the Opening Conference.



- 10. The Compliance Officer is a former employee that you fired.

