

**National Grain  
and Feed Association**

## **Update on Boot Pits/Permit Required Confined Space (PRCS), Hazard Communication and Sweep Augers**

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# Boot Pit/Permit Required Confined Space

- OSHA has issued numerous citations where “boot pits” are considered confined spaces
- OSHA does not have a specific definition for “boot pit;” similar to “guarded/unguarded auger” issue
- Based on citations and discussions, if it has a hatch or manhole cover, it is a PRSC.



# Are Boot Pits Permit Spaces?

- Some OSHA Area Offices *automatically* consider boot pits to be permit-required confined spaces because of the *potential* for atmospheric hazard
- “Potential” for hazardous atmosphere
  - OSHA’s guidance: “Some spaces may develop a hazardous atmosphere under certain conditions”
- BUT must be a *realistic* potential
  - Fact hazardous atmosphere *could* form in a space does not automatically transform it into a PRCS



# NGFA's Response

- Sweep auger issue now resolved, and OSHA has issued new guidance confirming that employees *can* be in the bin
- For boot pits
  - Do not wait for OSHA guidance
  - Develop NGFA guidance on how to assess boot pits
  - Let OSHA tell us why our method of evaluating is insufficient



# NGFA's Response

- Play offense
  - Sweep auger situation took on a life of its own
  - Smithpeter letters were a surprise
  - OSHA keep issuing additional guidance claiming that use of sweep augers while employees were in bin violated Section 1910.272(g) or (h)



# NGFA's Response

- Guidance document for grain handling employers on how to determine whether boot pits are PRCs
  - Issued September 2013
  - Modeled on OSHA's eLaws Confined Space Advisor, OSHA guidance and the rulemaking record



# OSHA's PRCS Standard

- For the standard to apply, the space must:
  - Meet the definition of a “confined space”; AND
  - Have a characteristic that makes it a “permit space”
- Types of boot pits – many!
  - Below grade or above
  - May or may not be in priority housekeeping area
  - Different types of ventilation/equipment



# OSHA's PRCS Standard

- What is a “confined space”?
  - Is not designed for continuous human occupancy
  - Has limited or restricted means for entry/exit *AND*
  - Is large enough so employee can enter and perform work
- *Must meet all three criteria*



# Are Boot Pits Confined Spaces?

**Large enough for workers to enter and work**

- **Yes**
- Employees enter to perform maintenance and inspections

**Limited or restricted means for entry or exit**

- **Maybe**
- Does anything prevent the worker from easily escaping?

**Not designed for continuous occupancy**

- **Often NO!**



# Is a Boot Pit a Confined Space?

- Is large enough and so configured that an employee can work in it? **YES**
  - Employees enter to perform maintenance
  - For some boot pits, employees *must* enter because they are priority housekeeping areas (floor areas inside 35 feet of inside bucket elevators – fugitive dust over 1/8 of an inch must be removed immediately)



# Is a Boot Pit a Confined Space?

- Has limited or restricted means for entry or exit?

## **MAYBE**

- Standard-sized door?
- Ladder, articulated steps, or something different than regular stairs?
- Crawl through or around equipment?
- Tunnels? (OSHA guidance on this unclear)
- Main issue: Anything that would prevent the employee from escaping easily?



# Is a Boot Pit a Confined Space?

- Not designed for continuous human occupancy?

## **THIS FACTOR OFTEN NOT MET**

- “Intended as a regular place of work and supplied with ventilation and other conditions necessary to support life”
- Critical factor is if employee can work in the space, not the primary use of the space
- OSHA Example: Primary purpose of telecommunications vault doesn’t matter; issue is whether employees can work in the space



# Is a Boot Pit a Confined Space?

- Key distinction between typical boot pit and other types of spaces: No operational adjustments need to be made when entering a boot pit
  - Entering a grain bin: isolate or empty the bin
  - Entering a boot pit: enter under normal operating conditions and start working
- Boot pits generally *are* designed for continuous human occupancy



# Is a Boot Pit a PRCS?

- Assuming a boot pit is a confined space, is it a PRCS?
- Must have *one* of the following:
  - Contains or potential to contain hazardous atmosphere
  - Potential for engulfment
  - Internal configuration that could trap employee
  - “Any other recognized safety or health hazard”



# How are Grain Bins Different?

- Section 1910.272(g) (bins) and (h) (flat storage structures) apply to entries
- 1910.272(g): test atmosphere if “reason to believe” there may be hazards
  - Wet grain
  - Fumigants
  - Some kind of upset condition



# Why Voluntarily Perform Air Monitoring?

- At the request of an OSHA Area Office
- In unique situations where there could be a hazard
- As a practice exercise for employees
- *Voluntary monitoring does not “convert” a boot pit into a PRCs – the definition is either met or it is not*



# Status of the Guidance

- NGFA met with OSHA on September 12, 2013
- OSHA asked a number of questions about boot pits, including atmospheric conditions
- Did not point out any flaws in the evaluation process set forth in the document
- Fairly non-committal – OSHA will continue to evaluate status on a case-by-case basis



# Globally Harmonized Standard for Labeling

## Globally Harmonized Standard for Labeling Amendment to OSHA Hazard Communication Standard

- On May 26, 2012 updates to the hazard communication standard became final.
- The majority of the changes involved adopting the Globally Harmonized Standard for Classification of Chemicals or GHS.
- The biggest changes to HazCom 2012 are in the area of combustible dust, data sheets and labeling.



# Hazard Communication 2012

## Key Implementation Dates

- December 1, 2013
  - Employers must train employees on the new formatted SDS and label requirements.
- June 1, 2015
  - Manufacturers must have converted all SDS and labels to the GHS format and begin sending to distributors and suppliers.



# Hazard Communication 2012

## Key Implementation Dates

- December 1, 2015
  - Distributors must be sending only new SDS and labels to their customers (employer).
- June 1, 2016
  - Employers must be in full compliance meaning that they have the new SDS's to replace the old MSDS and products received have the newly formatted labels.



# HazCom and Combustible Dust

- Combustible Dust is classified as “hazard, other than chemical” and is undefined
  - Shipments of products that could produce combustible dusts **e.g. whole grain when used in processing or where dust is produced is subject to new rule**
  - New requirements mean new Safety Data Sheets and labels for manufacturers, distributors and importers. Based on final rule grain handling facilities are considered manufacturer and distributor of an explosive hazard.
- However, food products such as grain are already covered under FDA provisions and are exempted from OSHA labeling requirements. In addition, there are letters of interpretation that state bulk shipments are exempted from labeling.
- OSHA says that materials that present a combustible dust hazard in their shipped form must be labeled. Yet, shipment of whole grain is exempted.



# HazCom and Combustible Dust, cont.

- Materials that present a combustible dust hazard in their shipped form must be labeled.
- Special labeling (f)(4): label may be shipped with the safety data sheet for solid materials that present a hazard only when processed or used downstream.
- The SDS must include the following information:
  - List the classification in Section 2
  - Signal word (Warning)
  - Hazard statements



# NGFA Legal Challenge to GHS

- The NGFA is leading a Coalition consisting of the American Feed Industry Association, Corn Refiners Association and National Oilseed Processors Association in legal challenge of final rule.
- Conducted “backdoor” rulemaking and violated Administrative Procedure Act.
- Oral argument before the DC Circuit Court of Appeals on September 24. Final decision in early 2015.



# OSHA CSHO Guidance Document

- On December 27, the OSHA issued a [memorandum](#) designed to provide guidance for Compliance Safety and Health Officers (CSHOs) to use in determining whether manufacturers and importers have properly classified their products for combustible dust hazards under both the current version and the [revised Hazard Communication Standard](#) (HCS).
- ***OSHA's position through the new guidance document seems to be that combustible dusts are already covered under the current Hazard Communication standard, even prior to the effective date of the revised version, which the NGFA is legally challenging. Based on this memorandum, a potential risk is that OSHA may issue a citation to a facility for not properly identifying combustible dust e.g. grain dust as a hazard (other than chemical), even prior to 2015.***
- This document is of particular concern since one of the key reasons behind NGFA's litigation was OSHA's failure to provide adequate notice and opportunity for public comment on including combustible dust in the revised standard.



# Combustible Dust Regulations and Compliance

The three parties, other than stakeholders, that are primarily involved in the combustible dust rulemaking process, include:

- Occupational Safety and Health Administration (OSHA)
- Chemical Safety Board (CSB)
- National Fire Protection Association (NFPA) - (Has 5 existing standards-Agriculture NFPA 61, Metals NFPA 484, Chemical NFPA 654, Sulfur NFPA 655, Wood NFPA 664).



# Combustible Dust Regulations and Compliance

- Chemical Safety Board Actions
  - Investigated combustible dust explosion in the chemical industry 2000-2006 and compiled a list of combustible dust explosions by industry type.
  - Held a hearing in 2006 in Washington recommending that OSHA:
    - Develop a combustible dust regulation to give guidance to industry as soon as they can.
    - Model or use NFPA 654 standard for rules.
    - Improve MSDS requirements that better describe explosive properties of dusts.



# OSHA's Acknowledges Complexity of Combustible Dust Rule

- Wide variety of materials, processes and equipment
- Difficulty in truly defining combustible dust
- Retrofitting facilities
- Additional performance based consensus standards  
e.g. NFPA



# Combustible Dust Standard

- OSHA will promulgate a Combustible Dust Standard in “several years” – *WSJ*, April 10, 2014
- OSHA changed combustible dust from the pre-rule stage to a long term action in late 2011 - then added it back in 12/21/2012 Regulatory Agenda (Pre rule stage – SBREFA review 10/13, now April 4/14)
  - Possible reasons
    - Election
    - Waiting on NFPA 652 Draft to be published



# Combustible Dust Standards

Combustible Dust issue is similar to the “whack a mole” game...the issue just keeps popping up in other places.

OSHA is using multiple avenues to address the hazard:

- Advanced Notice of Proposed Rulemaking
- Housekeeping Section of Proposed Walking and Working Surface proposed rule
- “Hazard, Other than Chemical” Category in Globally Harmonized Standard for Labeling Amendment to Hazard Communication Standard
- NFPA’s New Standard Covering the Fundamentals of Combustible Dust
- UN GHS Sub-committee
- EPA Risk Management Program



# EPA Risk Management Program

- EPA is contemplating major revisions to its Risk Management Program (RMP), such as expanding the number of sources under the program. Revisions are based on 2013 incident in West, Texas
- RMP was created in 1990 to address catastrophic chemical/gas emissions similar to Bhopal, India in 1984
- EPA is now asking if there is any reason why combustible dusts, such as agricultural dusts (e.g., grain dust, pesticide dust, etc.), **should not be added to the list** of covered chemicals.



# Hazard Communication: What Hasn't Changed

Manufacturers, distributors and suppliers are responsible for:

- Ensuring that their customers are provided a copy of these MSDS's/SDS's.



# OSHA Hazard Communication Standard

Material Safety Data Sheet		U.S. Department of Labor	
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.		Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072	
IDENTITY (As used on Label and List) <i>Dust from wheat, oats or barley</i>		<i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>	
<b>Section I</b>			
Manufacturer's Name	Emergency Telephone Number		
Address (Number, Street, City, State and Zip Code)	Telephone Number for Information		
	Date Prepared		
	Signature of Preparer (optional)		
<b>Section II — Hazardous Ingredients/Identity Information</b>			
Hazardous Components (Specific Chemical Identity; Common Name[s])	OSHA PEL	ACGIH TLV	Other Limits Recommended % (optional)
<i>None known</i>	<i>10 mg/m<sup>3</sup></i>	<i>4 mg/m<sup>3</sup>*</i>	<i>None</i>
<p><i>* This TLV applies only to dust from wheat, oats and barley.</i>  <i>The grain industry believes there is currently inadequate data to support the TLV.</i></p>			
<b>Section III — Physical/Chemical Characteristics</b>			
Boiling Point	<i>N/A</i>	Specific Gravity (H <sub>2</sub> O=1)	<i>N/A</i>
Vapor Pressure (mm Hg.)	<i>N/A</i>	Melting Point	<i>N/A</i>
Vapor Density (Air=1)	<i>N/A</i>	Evaporation Rate (Butyl Acetate=1)	<i>N/A</i>
Solubility in Water	<i>N/A</i>		
Appearance and Odor	<i>Light greyish brown, normally odorless.</i>		
<b>Section IV — Fire and Explosion Hazard Data</b>			
Flash Point (Method Used)	Flammable Limits	LEL	UEL
<i>N/A</i>	<i>N/A</i>	<i>55 g/m<sup>3</sup></i>	<i>Continuum</i>
Extinguishing Media	<i>Form CO<sub>2</sub>, dry chemical or water for.</i>		
<p><b>Special Fire Fighting Procedures</b>  <i>Do not use direct hose streams if dust can be dispersed into air.              Dust dispersed by water streams in the presence of an ignition source could cause an explosion.</i></p>			
<p><b>Unusual Fire and Explosion Hazards</b>  <i>If improperly handled, stored and/or exposed to an ignition source, this material may burn.              Air-borne dust in sufficient concentrations, when compressed and exposed to a sufficient ignition source, can explode.</i></p>			
(Reproduce locally)		GEAPS In-Grain • April 1989 OSHA 174, Sept. 1985	

## Current MSDS for Grain Dust



# 2013 Required Training

- Since HazCom 2012 is requiring a new label and SDS, OSHA has specified that employers must provide training on the new approach
- The intent of this training is to help ensure that workers can access and use the information on the new labels and SDSs effectively
- New labels and SDSs are already being produced and are coming into American workplaces



# Label Requirements

- Labels on shipped containers must include:
  - Product Identifier
  - Signal Word
  - Pictogram
  - Hazard Statement(s)
  - Precautionary Statement(s) - for each hazard class and category
  - Supplier Identification (Name, Address, Phone Number)



# Training on Label Elements

- Labels on shipped containers of hazardous chemicals will be changing by June 1, 2015
- The primary change is that information on labels has been standardized
  - There are certain types of information required to appear on labels
  - All suppliers have the same requirements, so labels should be more consistent in approach than current labels



# Signal Word

- “Signal word” means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label
- The signal words used in this section are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe. No longer use “caution”











# Pictogram

- “Pictogram” means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical
- Nine pictograms are designated under this standard for application to a hazard category



# HCS Pictograms and Hazards

<b>Health Hazard</b>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<b>Flame</b>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<b>Exclamation Mark</b>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non-Mandatory)</li> </ul>
<b>Gas Cylinder</b>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<b>Corrosion</b>  <ul style="list-style-type: none"> <li>• Skin Corrosion/ Burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<b>Exploding Bomb</b>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<b>Flame Over Circle</b>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<b>Environment (Non-Mandatory)</b>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<b>Skull and Crossbones</b>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>



# Hazard Statement

- “Hazard statement” means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard
  - Example: Fatal if swallowed (Acute Oral Toxicity)

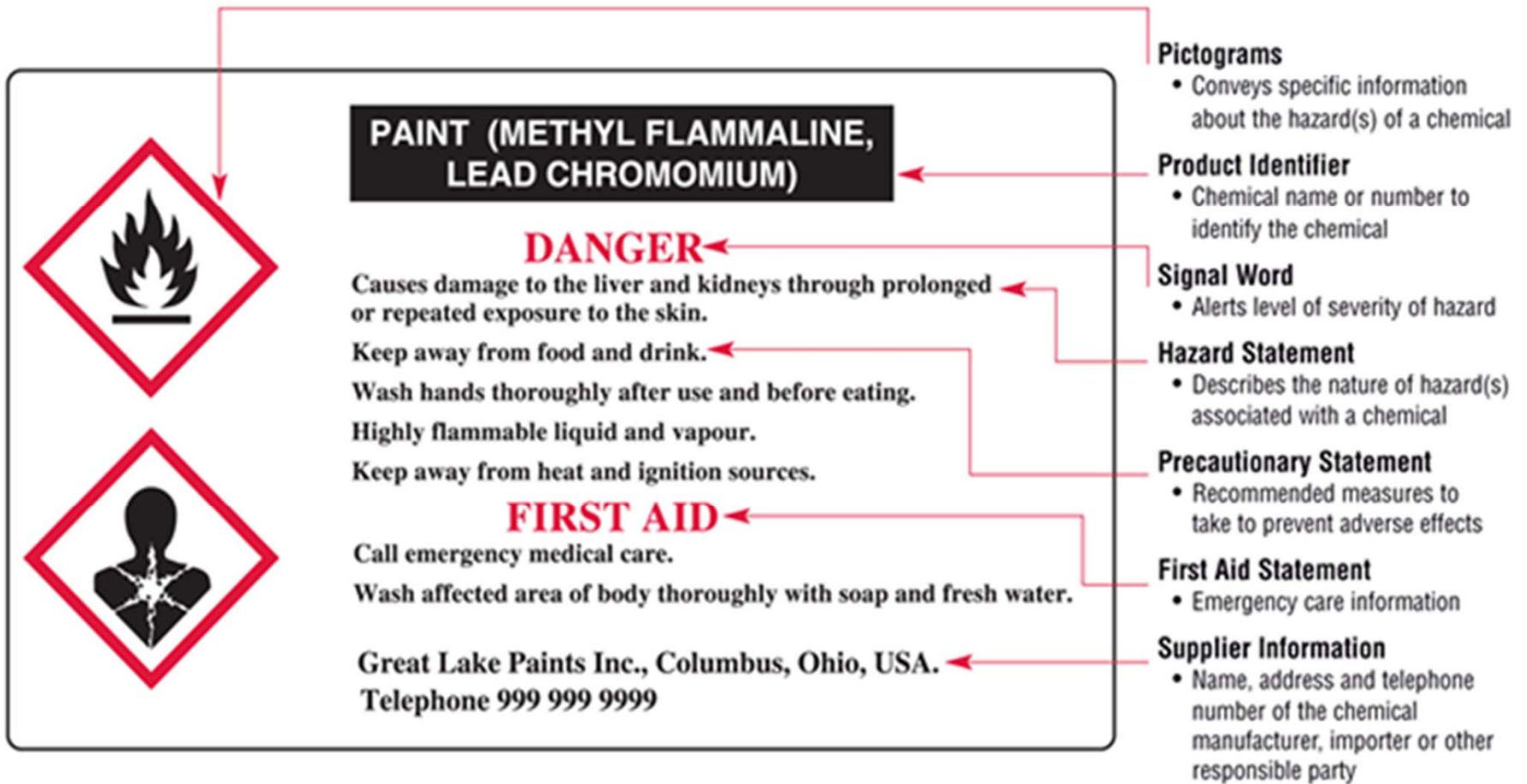


# Precautionary Statement

- “Precautionary statement” means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling
  - Example: Do not eat, drink, or smoke when using this product
  - Example: Keep container tightly closed



## HCS/GHS Labeling Components



# Label Example

	XYZ... Chemical	
		
<b>WARNING</b>		
Flammable Liquid and vapor		
Harmful if swallowed		
May cause damage to organs (liver)		
May cause damage to organs through prolonged or repeated exposure (heart)		
Suspected of damaging fertility		
<p>Keep away from heat, sparks, open flames and hot surfaces - No smoking. Do not breathe vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use protective equipment as required. Wear protective gloves and eye protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Store locked up in a well ventilated place. Keep cool. Dispose of contents and container in accordance with local, state and federal regulations.</p>		
<b>First Aid:</b>		
If swallowed: Call a doctor if you feel unwell. Rinse mouth.		
If on skin or hair: Remove immediately all contaminated clothing. Rinse skin with water.		
If exposed or if you feel unwell: call a doctor.		
<b>Fire:</b>		
In case of fire: Use water spray foam, dry chemical or carbon dioxide (CO <sub>2</sub> ) for extinction		
GHS Company, 123 Global Drive, Cincinnati, OH		telephone (800) 555-8888



# Safety Data Sheet Format

- New safety data sheets will be organized using a specified order of information
- The required information will appear in the same sections of an SDS regardless of the supplier
- The most important information will be listed in the first sections of the SDS



# SDS 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 control/personal protection



## SDS Sections, cont.

- 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





## Example of New Format SDS

NFPA 704 Placard & Ratings Voluntarily Provided

GHS System and Labels Down in Section 2

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Product XYZ		
Synonyms	:			
SDS Number	:	888100008809	Version	: 1.1
Product Use Description	:	Fuel		
Company	:			
			Chemtrec (Emergency Contact)	: (800) 424-9300

### SECTION 2. HAZARDS IDENTIFICATION

**Classifications** :

- Flammable Liquid – Category 1 or 2 depending on formulation.
- Aspiration Hazard – Category 1
- Carcinogenicity – Category 2
- Specific Target Organ Toxicity (Repeated Exposure) – Category 2
- Specific Target Organ Toxicity (Single Exposure) – Category 3
- Skin Irritation – Category 2
- Eye Irritation – Category 2B
- Chronic Aquatic Toxicity – Category 2

**Pictograms** :



**Signal Word** :

**Danger**



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# SDS Requirements

- SDSs must be readily accessible to workers when they are in their work areas, during each work shift
- Hazard communication works when employers also use SDS information to make sure that proper protective measures are being implemented



# Safety Data Sheets

- Distribution
  - An updated SDS must be provided with products shipped by June 1, 2015
  - Companies are not required to send new SDSs to previous customers who may still have the product in inventory
  - New SDSs do not have to be provided for chemicals no longer produced



# NFPA and HMIS Labeling Systems

For years these two labeling systems were acceptable to OSHA for labeling portable containers in the workplace.

CHEMICAL NAME \_\_\_\_\_

**HEALTH HAZARD**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**FIRE HAZARD**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**SPECIFIC HAZARD**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**INSTABILITY**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**CHECK OFF APPROPRIATE BOXES**

**PHYSICAL HAZARDS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**CHEMICAL HAZARDS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**HAZARDOUS COMBOS & EFFECTS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**PHYSICAL HAZARDS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**CHEMICAL HAZARDS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**HAZARDOUS COMBOS & EFFECTS**

☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5  
☐ 6  
☐ 7  
☐ 8  
☐ 9  
☐ 10

**ROUTE OF ENTRY**

☐ INHALATION ☐ SKIN ABSORPTION ☐ INGESTION

**HEALTH HAZARDS**

☐ NO HEALTH HAZARD  
☐ ACUTE TOXIC  
☐ IRRITATION  
☐ CORROSION  
☐ REPRODUCTIVE TOXIC

**PHYSICAL HAZARDS**

☐ FLAMMABLE  
☐ OXIDIZING  
☐ CORROSIVE  
☐ EXPLOSIVE

**ENVIRONMENTAL HAZARDS**

☐ AQUATIC TOXICITY  
☐ PERSISTENT  
☐ BIOACCUMULATIVE  
☐ MOBILE

**PERSONAL PROTECTION**

☐ GOGGLES  
☐ GLOVES  
☐ BOOTS  
☐ OTHER

**METHANOL**

**1 HEALTH HAZARD**

**1 FIRE HAZARD**

**0 REACTIVITY**

**TRIETHYLENE GLYCOL**

**1 HEALTH HAZARD**

**1 FIRE HAZARD**

**0 REACTIVITY**

# Labels

- Workplace Labeling
  - No change to general workplace labeling requirements
  - HMIS labels and NFPA ratings, by themselves, are not sufficient for workplace labels
  - NFPA rating systems used for emergency response
- Before the June 1, 2015 deadline, employers may use labels compliant with HCS 1994



# Your HazCom 2014 Program

Between now and June 1, 2016 you need to consider doing the following:



- Conduct a thorough review of all hazardous chemicals and substances used or stored at your facility.
- Develop a list (this is required).



# Your HazCom 2014 Program

- On your list place a MSDS column and a SDS column.
- Go through your entire list and contact the manufacturer by phone or go on their website and ask for/download an SDS.
- If the SDS is available get it.
- If not make sure you at least have the MSDS.
- Place a check in the SDS column every time you are successful obtaining the SDS.



# Your HazCom 2014 Program

- Then every 3 to 6 months go back to your list and attempt to obtain more SDS's until you get them all.
- Remember there is a phase in process so you will not be successful obtaining SDS's right away.



# Your HazCom 2014 Program – Labeling

- Make sure your program properly addresses labeling, especially labeling of portable containers in the workplace.
- Labels for portable containers in the workplace must have either:
  - The same information as the manufacturer label with the exception of the manufacturer's address or...
  - Product identifier and words, pictures, symbols or combination which provide employees with specific information regarding the health and physical hazards of the chemical.



# HazCom 2014 Summary

- Develop a written program describing how the standard elements are implemented.
- Maintain a list of all hazardous chemicals.
- Obtain and make data sheets available to employees.
- Train your employees on the new SDS and label requirements.



# Example of Training Certificate

CERTIFICATE OF TRAINING	
HAZCOM 2012	
This is to certify that I have attended the above training program which has informed me of the following:	
<input type="checkbox"/> Explained benefits of OSHA aligning with Globally Harmonized Standards including: - Common hazard definitions - Specific labeling criteria - Standardized Data Sheets	
<input type="checkbox"/> Reviewed some of the common health and physical hazards of chemicals.	
<input type="checkbox"/> Discussed what has not changed in the hazard communication standard such as: - Written program - Chemical list - Safety Data Sheets - Training - Non-routine tasks	
<input type="checkbox"/> Covered the major changes to the hazard communication standard mainly: - Safety Data Sheets - Labeling	
<input type="checkbox"/> Material Safety Data Sheets (MSDS) are now called Safety Data Sheets (SDS).	
<input type="checkbox"/> Safety Data Sheets are now standardized and include 16 sections instead of 9 previously.	
<input type="checkbox"/> Reviewed sample SDS.	
<input type="checkbox"/> Labels now require 6 specific items which are: - Name - Signal Word - Hazard Statement - Pictograms - Precautionary Statements - Name, address and phone number of manufacturer	
<input type="checkbox"/> Reviewed sample label as well as all 9 pictogram symbols.	
<input type="checkbox"/> Discussed the implementation dates for training, SDS and labels.	
<input type="text"/> Date	<input type="text"/> Employee Signature
<input type="text"/> Date	<input type="text"/> Trainer's Signature



# Example of Training Quiz

## GHS Pictogram Quiz

Name: \_\_\_\_\_

Date: \_\_\_\_\_



Match the Pictogram to the correlating Hazards

- \_\_\_ Acute Toxicity: The adverse effects of a substance that result either from a single exposure or from multiple exposures in a short space of time. May be Fatal or Toxic.
- \_\_\_ Oxidizing Agent: Strong oxidizers are capable of forming explosive mixtures when mixed with combustible, organic or easily oxidized materials.
- \_\_\_ Aquatic Toxicity: The effects of manufactured chemicals and natural materials and activities on aquatic organisms.
- \_\_\_ Health Hazard: Substance may be a carcinogen, can damage eyes, lungs, or other target organs; can also can be a sensitizer, mutagen, or be a respiratory sensitizer.
- \_\_\_ Corrosion: Causes Skin Corrosion or Burns, can cause eye damage. Corrosive to metals.
- \_\_\_ Gases Under Pressure including compressed gasses, liquefied gasses. Gas released may be very cold. Gas container may explode if heated.
- \_\_\_ Explosives: Explosive articles, and substances as well as mixtures and articles that are manufactured to produce a practical explosive or pyrotechnic effect.
- \_\_\_ Flammables: Flammable gasses, liquids, or aerosols; self reactive or pyrophoric material; self-heating substances and mixtures, organic peroxides.
- \_\_\_ Irritant: Harmful to the skin or eyes, a skin sensitizer or respiratory irritant, may experience narcotic effects.

Countries all over the world are beginning to adopt the United Nations' universal approach to classifying and communicating chemical hazards. The GHS pictograms are provided to assist in evaluating the GHS label elements. Chemical hazard communication is used to identify hazardous products for:

- ♦ Chemical Risks
- ♦ Health Risks
- ♦ Environmental Risks



# Frequently Asked Questions

- Will the NFPA change their warning numbers 0-4 minor to major to the GHS 1-4 major to minor hazards to eliminate confusions between the order of hazards?
- What will be required to compliment an HMIS label for a secondary container after 6/1/2015?
- Will the GHS labeling requirement affect "transfer containers?" For example, can an employer make their own labels using generic words along with the appropriate pictogram [WARNING - LUBE OIL w/ flame pictogram, etc.]?
- Is an MSDS required for all products produced at a facility i.e. animal feed and feed ingredients
- Can you still use old labels for material that is still in stock after the date for the new labels goes into effect?



# Updated HazCom Web Page

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OSHA



Hazard Communication

Aligns with the UN's Globally Harmonized System of Classification and Labeling of Chemicals

## HAZARD COMMUNICATION

The standard that gave workers the right to know, now gives them the right to understand.

Safety & Health Topics Page: Hazard Communication

Labeling Safety Data Sheets Pictograms Effective Dates



Dr. David Michaels discusses the publication of the Final Rule for Hazard Communication

[\[Video\]](#) [\[Statement\]](#)

"Exposure to hazardous chemicals is one of the most serious threats facing American workers today," said U.S. Secretary of Labor Hilda Solis. "Revising OSHA's Hazard Communication standard will improve the quality and consistency of hazard information, making it safer for workers to do their jobs and easier for employers to stay competitive."

The Hazard Communication Standard (HCS) is now aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This update to the Hazard Communication Standard (HCS) will provide a common and coherent approach to classifying chemicals and communicating hazard information on labels and safety data sheets. Once implemented, the revised standard will improve the quality and consistency of hazard information in the workplace, making it safer for workers by providing easily understandable information on appropriate handling and safe use of hazardous chemicals. This update will also help reduce trade barriers and result in productivity improvements for American businesses that regularly handle, store, and use hazardous chemicals while providing cost savings for American businesses that periodically update safety data sheets and labels for chemicals covered under the hazard communication standard.

### Highlights:

-  December 1, 2013 Training Requirements Fact Sheet [\[PDF\\*, 289 KB\]](#)
-  OSHA Brief on Labels and Pictograms [\[PDF\\*, 427 KB\]](#)
- HCS/HazCom 2012 Final Rule
  - Federal Register:** The Final Rule was filed on March 20th at the Office of the Federal Register and available for viewing on their Public Electronic Inspection Desk. The Federal Register published the final rule on March 26, 2012. The effective date of the final rule is 60 days after the date of publication.
    - [Federal Register \[PDF\\*, 52 MB\]](#)
- HCS Comparison: HazCom 1994 and HazCom 2012
  - [Side-by-side](#)
  - [Redline Strikeout of the Regulatory Text](#)
- HazCom 1994
- Press Release:** US Department of Labor's OSHA publishes final rule to update the Hazard Communication Standard (HCS)
- Guidance
  - [OSHA Briefs \[PDF\\*, 260 KB\]](#)
  - [Fact Sheet](#)
  - [Quick Cards](#)
- [Downloadable Pictograms](#)
- [August 2012 OSHA/SCHC Alliance Webinar](#)
- [Downloadable Hazard Communications 2012 Presentation \[PPTX\\*, \]](#)
- [Question of the Month](#)



# Updated Webpages

- HazCom 2012 Webpage

<http://www.osha.gov/dsg/hazcom/index.html>

- Safety & Health Topics Webpage

<http://www.osha.gov/dsg/hazcom/index2.html>

- UN GHS Sub-Committee Home Page

[http://www.unece.org/trans/danger/publi/ghs/ghs\\_welcome\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html)



# Historic Sweep Auger Enforcement

- Grain Standard includes no provision re: sweep augers or work inside bins with sweep augers
- General requirement regarding equipment inside bins

*1910.272(g)(1)(ii): “All mechanical, electrical, hydraulic, & pneumatic equipment which presents a danger to employees inside grain storage structures shall be deenergized & shall be disconnected, locked-out & tagged, blocked-off, or otherwise prevented from operating by other equally effective means or methods.”*



# Sweep Auger - Enforcement and Cases

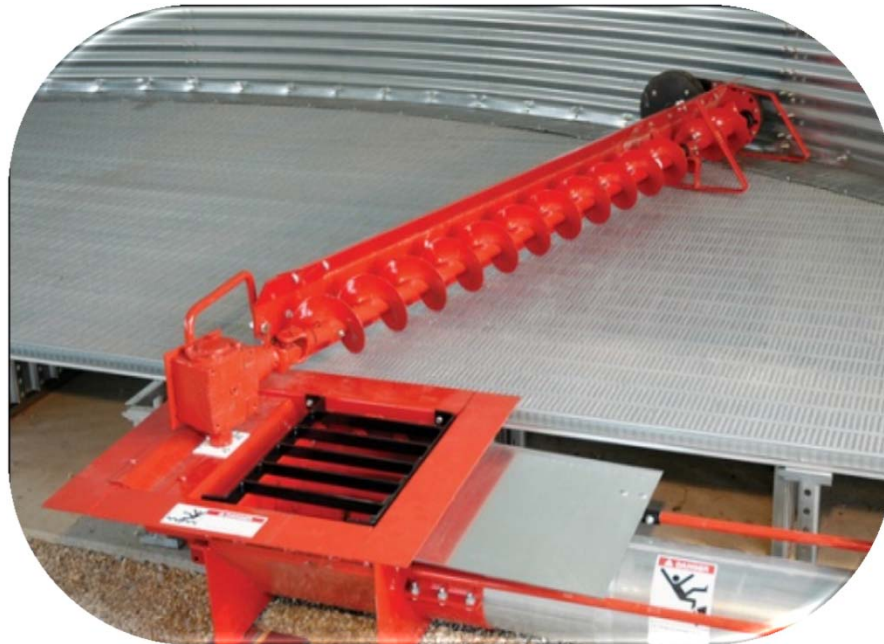
Despite losing sweep auger cases in litigation, OSHA continued issuing citations, leaving employers with the following options:

- Accept citation and face risk of Repeat violations (w/ penalties of \$70,000+ per violation)
  - Challenge citations and incur legal fees
  - Not empty bins in economical or efficient manner



# Sweep Auger Settlements

- Illinois company cited despite using both administrative & engineering controls to keep employees out of danger zone
- Area Director had personal knowledge of sweep auger operations
- OSHA withdrew citation and agreed to settlement terms that provided guidance re: acceptable alternative sweep auger operations



# Sweep Auger Memorandum

- On May 3 OSHA issued a memorandum to its Regional Administrators providing “guidance” on sweep auger operations. The document was based on the aforementioned settlement and addresses key issues such as definition of “guarded” and if an employee can be in a bin with energized equipment.
- The Safety, Health and Environmental Quality Committee has developed a guidance document on how to implement a sweep auger policy based upon the May 3 memo.
- OSHA has archived the 2009 sweep auger letter.



# Sweep Auger Memorandum (cont.)

- OSHA's sweep auger policy memo states that employees are allowed to be physically inside a bin with an energized sweep auger provided:
  - the only unguarded portion of the auger is in front;
  - sub-floor augers are guarded by secure grates or other guards;
  - there is an engineering control (such as a standard guardrail attached to the auger, a portable guard rail trailing seven feet behind the auger, or a dead-man switch on an operating control inside an enclosure or attached to a handle that keeps the employee seven feet back from the auger); **and** the facility's bin entry permit procedures are followed.



# 10 Sweep Auger Safety Principles

1. Follow 1910.272 permit requirements
2. De-energized & LO/TO sweep and sub-floor augers before setting-up/digging-out
3. Install and secure grates over sub-floor auger
4. Sweep auger must be guarded as designed by manufacturer
5. No walking on grain at depths presenting an engulfment hazard
6. Rescue trained & equipped observer posted outside the bin



# 10 Sweep Auger Safety Principles

7. Use engineering controls to prevent contact with auger (use of administrative controls alone is insufficient)
8. Use speed control mechanism or bin stop device to prevent uncontrolled rotation of the sweep auger
9. No hands, legs, or other similar means to manipulate an operating auger
10. To adjust auger, it must be unplugged (w/ plug controlled by adjuster) or locked out



# Acceptable Engineering Controls

- Auger with **Attached Standard Guard Rail** (compliant with OSHA's Machine Guarding standards)
- **Portable Guard Rail** maintained at least 7 feet behind sweep auger
- Portable **Operator Standard Guard Rail Enclosure** with dead-man switch
  - Auger operates only when worker is within
- Auger with **Control Mechanism**
  - Auger operates only when operator contacts the controls
  - Ex: **Safety Handle** with dead-man switch



# Thank You

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