

City of Bowling Green Administrative Instruction No. 45

The Global Harmonization System Hazard Communication

Policy Statement

It is the policy of Bowling Green, Ohio to actively provide for the well being of its employees by willingly adhering to the requirements of the Hazard Communication Standard 1910.1200 and other applicable local, state and federal requirements.

In 2012, the Hazard Communication Standard was revised to address those inconsistencies through the adoption of a "Globally Harmonization System" or GHS, established by the United Nations. This finalized standard is referred to as "HazCom 2012", or "GHS", and includes the new GHS requirements.

The GHS system makes the communication of hazards consistent through pictograms and other means that overcome language barriers, and provides information to chemical handlers through one label, as opposed to the many labels and languages formerly used to label chemical products. The GHS also provides a uniform approach to evaluating and classifying hazards, and to communicating those hazards through Safety Data Sheets or SDSs, formerly referred to as Material Safety Data Sheets or MSDSs.

OSHA developed a phased-in adoption schedule for the revised standard ranging from December 1, 2013 to June 1, 2016. The components of this policy have been revised to meet the new regulatory requirements. Employees should expect to see both old and new chemical labels and data sheets as manufacturers work to meet the compliance deadlines.

1. Responsibilities

- 1a. The Personnel Director is designated as the Safety Coordinator and is authorized by the Municipal Administrator to direct the safety activities for each department operating within the municipality of Bowling Green. The Superintendent or Division Head or his/her designee shall be responsible for implementing and maintaining OSHA Standards and other safety activities as required by law. Employees working for the municipality of Bowling Green are responsible for practicing and maintaining a safe working environment, as described in this procedure.
- 1b. The Superintendent or Division Head, or his/her designee, shall be responsible for obtaining Safety Data Sheets (SDS) for hazardous materials used within the Department and periodically checking SDS's to ensure latest revision, reviewing the Inventory Chemical List and discarding hazardous materials no longer used within the Department. Auditing of the SDS books will be conducted on a periodic basis, which will include at least once per year at the discretion of Superintendent or Division Head.
- 1c. It is the decision of the Municipal Administrator to utilize the Fire Division, Police Division and/or the local hospital, as Emergency Responders. Emergency Responders (ph. #911) shall be notified in the event of an emergency beyond the scope and limitations of the Department/Division. This shall include but not necessarily be limited to water, air or land contamination or fire, medical or weather related emergencies. All corrective actions will be at the discretion of the Emergency Responders.

2. Safety Data Sheets (SDSs)

- 2a. Safety Data Sheets, previously called Material Safety Data Sheets, shall be located at convenient locations in every department/division/office, so that they are readily accessible at all times to all employees.
- 2b. The Superintendent shall be responsible for keeping and maintaining Safety Data Sheets used by employees to perform their job duties. The SDSs shall be gathered and organized in such a manner as to make accessing the information readily available and convenient at all times while employees are working. The SDSs are required to include the following sixteen sections of information:
 - Product and company identification
 - Hazards identification
 - Information on ingredients
 - First aid measures
 - Firefighting measures
 - Accidental release measures
 - Handling and storage
 - Exposure control/personal protection
 - Physical and chemical properties
 - Stability and reactivity
 - Toxicological information
 - Ecological information
 - Disposal considerations
 - Transport information
 - Regulatory information
 - Other information
- 2c. No new product of a hazardous nature will be accepted into any Department/Division/Office without an SDS on file or accompanied with the material.
- 2d. Safety Data Sheets shall not be discarded at any time. When a material is no longer used in the department or division, the SDS shall be pulled from the SDS Book and archived indefinitely within the Department.
3. List of Hazardous Chemicals
 - 3a. A Chemical Inventory List of known hazardous chemicals used by the Department shall be located in every SDS Book.
4. Hazard Determination
 - 4a. The Division Superintendent/manager shall be responsible for reviewing the SDS to determine whether personal protective equipment (PPE) (not normally provided by the municipality) may be required for employees to perform their duties safely and then pass that information on to employees if necessary.
 - 4b. The Division Superintendent/manager shall inform all employees that they are responsible for reviewing SDSs for any new material prior to the start of working with the material.
5. Container Labeling
 - 5a. The Superintendent shall be responsible for ensuring that all containers have the original manufacturer product use information and warning label. GHS labels may vary in appearance, but they are required to include the 6 specific elements. A label example is provided below.

The Basic Parts of A GHS-Compliant Label

1 → **n-Propyl Alcohol**
UN No. 1274
CAS No. 71-23-8

2 → **DANGER**

3 → Highly flammable liquid and vapor. Causes serious eye damage.
May cause drowsiness and dizziness.

4 → Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.

Fill Weight: 18.65 lbs. Lot Number: B56754434
Gross Weight: 20 lbs. Fill Date: 6/21/2013
Expiration Date: 6/21/2020

See SDS for further information.

5 → Acme Chemical Company • 711 Roadrunner St. • Chicago, IL 60601 USA • www.acmechem.com • 123-444-5567

6 →

1. **Product Identifier** - Should match the product identifier on the Safety Data Sheet.
2. **Signal Word** - Either use "Danger" (severe) or "Warning" (less severe)
3. **Hazard Statements** - A phrase assigned to a hazard class that describes the nature of the product's hazards
4. **Precautionary Statements** - Describes recommended measures to minimize or prevent adverse effects resulting from exposure.
5. **Supplier Identification** - The name, address and telephone number of the manufacturer or supplier.
6. **Pictograms** - Graphical symbols intended to convey specific hazard information visually.

Sample label courtesy of Weber Packaging Solutions • www.weberpackaging.com

1 – Product Identifier: The product name provided in this example (n-Propyl Alcohol) should match the identifier on the product's Safety Data Sheet.

2 – Signal Word: A signal word on a label used to indicate the relative level of severity of a hazard and alert the reader to a potential hazard. The signal words used are "Danger" for the more severe hazards, while "Warning" is used for less severe hazards. In the example shown, the manufacturer has used the word "DANGER" to indicate a more severe hazard.

3 – Hazard Statements: Hazard statements are statements assigned to a hazard class that describes the nature of the products hazards, "may cause dizziness" for example.

4 – Precautionary Statements: Statements which describes recommended measures to minimize or prevent adverse effects resulting from exposure, "keep away from heat" for example.

5 – Supplier Identification: The name, address, and telephone number of the manufacturer or supplier, in case you need to contact them.

6 – Pictograms: Graphical symbol intended to convey specific hazard information visually, in the case of our sample label, the manufacturer has used 3 pictograms to denote hazards.

Pictograms are explained in more detail in the following section.

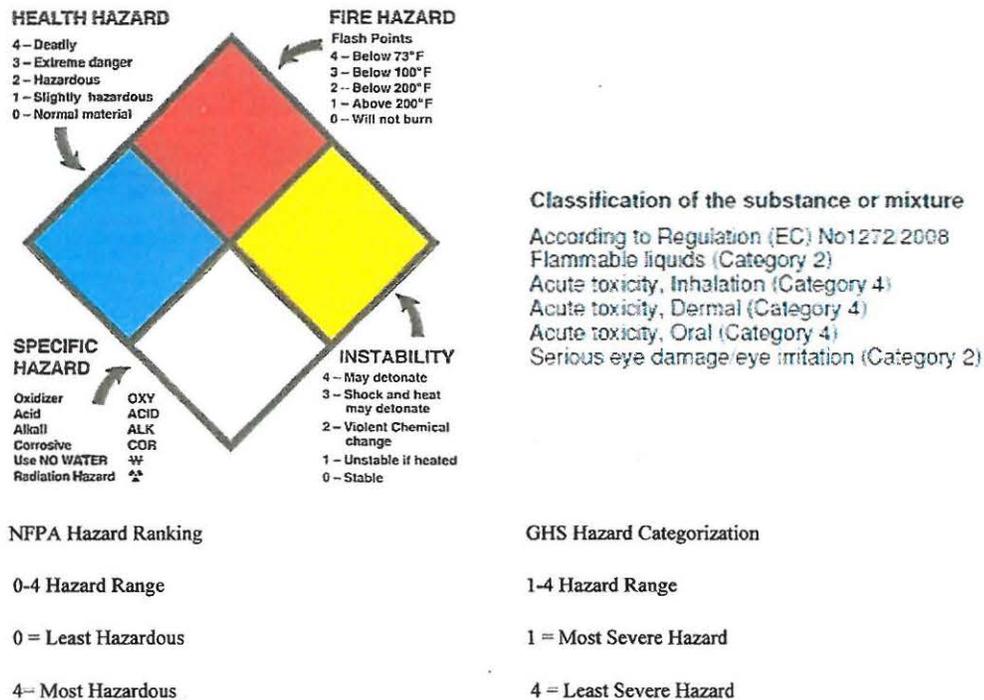
5b. Pictograms

Under the new Global Harmonization Systems, graphical symbols called “pictograms” are used to convey specific hazards. Product specific pictograms will be found on both GHS labels and with Safety Data Sheets. The nine established pictograms, and their conveyed hazards, are illustrated below.

HCS Pictograms and Hazards

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

Prior to GHS adoption, the City of Bowling promoted the NFPA (National Fire Protection Association) Hazard Warning Diamond labeling system. The NFPA Hazard Warning Diamond is based on the NFPA standard 704 rating system. This standard provides a readily recognized, easily understood system for identifying hazards and their severity using color and number indicators. While this system is still in use, it does not meet the GHS requirements. Therefore, the NFPA system can be used in addition to, but not in place of GHS labeling. Referring to the different systems can be confusing, but keep in mind that the GHS hazard category systems are unlikely to be found on product labels. Both ranking systems may appear in SDSs, but the ranking are identified as either GHS or NFPA ranking.



6. Employees Training and Information

6a. All current, affected employees within all departments and divisions employed by the municipality shall attend a Hazard Communication Safety Training Session in which the following shall be discussed.

- An overview of the requirements contained in the Global Harmonization System.
- Location and availability of the written Global Harmonization System (HazCom) Procedure.
- Understand what a Safety Data Sheet and its components.
- Physical and health effects of hazardous chemicals.
- Methods and observation techniques used to determine the presence or release of hazardous chemicals in the work area.
- How to lessen or prevent exposure to these hazardous chemicals through usage of control/work practices and personal protective equipment.
- Precautions the municipality has taken to lessen or prevent exposure to hazardous chemicals.
- Emergency procedures to follow if they are exposed to these chemicals.

- 6b. New, transferred, and seasonal employees within all departments and divisions employed by the municipality shall be informed about the Global Harmonization System - HazCom by the Superintendent or his/her designee.
 - 6c. Superintendents or designees shall be responsible for providing specific on-site training as to the hazardous chemicals that may be present in their division or work area. This information shall be repeated for each new or transferred employee.
7. Non-routine Tasks
- 7a. Periodically, employees will be required to perform non-routine tasks. For example, employees working for a specific department are aware of all job functions normally performed within that division. On occasion, however, employees may be required to assist other divisions. In this instance, which is considered a non-routine task, the transferring employee shall be made aware of any hazardous chemicals he/she may be exposed to by the Superintendent or his/her designee of the division in which the transferring employees will be working in. This information shall include specific chemical hazards, protective and safety measures the employee can take and measures the Department has taken to lessen the hazards including ventilation, respirators, presence of other employees and emergency procedures.
8. Pipes
- 8a. Pipes are not considered a container.
9. Informing Contractors
- 9a. Superintendents or their designees are responsible for providing Contractors information regarding hazardous chemicals they may be exposed to while performing their job on City property. Also, where Safety Data Sheets are located, emergency procedures and phone numbers, if applicable, and any precautions the Contractors may take to lessen the possibility of exposure.
 - 9b. Contractors working on City property either in conjunction with or independently from any of the Divisions shall provide SDSs to the Municipal Administrator in order that all City employees are informed and/or trained, if necessary, about the hazards they may encounter while working with a contractor.
10. Chemical Spill
- 10a. Appropriate absorbent material shall be kept readily accessible wherever hazardous materials are stored, for example, baking soda for acids, and floor-dry for oils and gasoline. In the event of a hazardous spill, employees are to contain as much of the spill as possible using temporary dikes and/or absorbent material. Employees are required to notify their Supervisor so that a determination can be made as to whether Emergency Responders should be notified, unless it is an obvious emergency in which case employees are to call 911. To gain as much information as possible, employees are to monitor the spill until the Emergency Responders arrive unless doing so would endanger their lives or the lives of others.
 - 10b. Superintendents or their designees are to evaluate the probability of the hazardous spill reaching storm drains, sanitary sewers or, otherwise entering the waterways. They are also to check into the possibility of land and air contamination and relay this information to the appropriate Emergency Responders.

10c. If a chemical spill is likely to reach a storm drain or enter the City waterways contact the:
OEPA (1-800-282-9378) as well as the Coast Guard and provide the following information:

1. Time of spill/release or when first observed
2. Location of spill/release
3. Material released
4. Probable source, volume and duration
5. Weather conditions
6. Personnel on scene
7. Actions initiated
8. Person to contact on scene

10d. If chemical spill/release is likely to involve the water lines or sanitary sewer employees are to contact the Emergency Responders (911) and give as much information as possible regarding the spill/release. The Municipal Administrator shall also be notified.

10e. Spills or releases of a hazardous nature shall be documented and filed with the Municipal Administrator at the City Administrative Services Building.

11 Medical Attention

11a. The Personnel Director working with the Division Superintendents shall be responsible for ensuring that each employee review and use the Personal Protection Equipment recommended by the chemical manufacturer when using hazardous materials.

11b. Employees are to call the Emergency Responders in the event of a medical emergency. This includes any reaction suspected of causing injury or illness through ingestion, inhalation, injection or absorption.

11c. Division Superintendents shall pull all suspected Manufacturer's Chemical SDSs and pass the information on to the Emergency Responders upon their arrival.


Richard A. Edwards Date
Mayor