### **Sample Hazard Communication Program**

#### Introduction

The Hazard Communication Standard requires employers to develop a written hazard communication program. You can adapt the **sample** hazard communication program that follows to the requirements and conditions of your workplace.

#### **Our Hazard Communication Program**

#### **General Policy**

The purpose of this notice is to inform you that [Name of Municipality] complies with MIOSHA R325.77001-.77003 (OSHA Hazard Communication Standard, Title 29 Code of Federal Regulations 1910.1200)

- by compiling a hazardous chemicals list,
- by using Material Safety Data Sheets (MSDS's),
- by ensuring that containers are labeled, and
- by providing you with training.

This program applies to all of our work operations where there may be exposure to hazardous substances under normal working conditions or during an emergency situation. This municipality relies on Material Safety Data Sheets (MSDS's) from suppliers to meet determination requirements.

[Name of Individual] is the program coordinator. He/she reports to the safety director who has overall responsibility for the program. The program coordinator will review and update the program as necessary. You may obtain a copy of the written program from the program coordinator.

Under this program, the company will inform you of

- the contents of the Hazard Communication Standard,
- the hazardous properties of chemicals with which you work,
- safe handling procedures, and
- measures you can take to protect yourselves from these chemicals.

You will also learn about the hazards associated with non-routine tasks, such as the cleaning pits, tanks, or spills as well as the hazards associated with chemicals in unlabeled pipes.

#### **List of Hazardous Chemicals**

The program coordinator, working with department heads, will make a list of hazardous chemicals and related work practices used in the facility, and will update the list as necessary. Our list of chemicals identifies all of the chemicals used in our work process areas.

Each work area maintains and posts its own list of the hazardous chemicals to which employees in the area may be exposed. Each list identifies the corresponding MSDS for each chemical. A master list of these chemicals will be maintained by, and is available from, the program coordinator.

#### Material Safety Data Sheets (MSDS's)

MSDS's provide the specific information on the chemicals that you use. The program coordinator will maintain a binder with an MSDS on every substance on the list of hazardous chemicals. The MSDS will comply with MIOSHA requirements for information.

Management will make certain that each work site maintains an MSDS for hazardous materials in that area. These MSDS's are readily available to you at your workstations during your shifts. The location of the MSDS's in your department is:

The program coordinator is responsible for acquiring and updating MSDS's. He/she will contact the chemical manufacturer or vendor if additional research is necessary or if the manufacture or vendor has not supplied an MSDS with an initial shipment. Department heads must clear all new procurements of chemicals with the program coordinator.

A master list of MSDS's is available from the program coordinator. The location(s) of the master list are:

#### **Labels and Other Forms of Warning**

The program coordinator will ensure that all hazardous chemicals have proper labeling and are updated, as necessary. At a minimum, labels will provide the substance's chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer or other responsible party.

Your department head will refer to the corresponding MSDS if you need help in verifying label information. The supervisor of shipping and receiving will check all containers that come from the plant to make sure they have the proper labels.

If there are a number of stationary containers within a work area that have similar contents and hazards, we will post signs that provide the hazard information. On our stationary process equipment, regular process sheets, batch tickets, blend tickets, and similar written materials will be substituted for container labels when they contain the same information as labels. These written materials are readily available to you during your work shift.

If you transfer chemicals from a labeled container to a portable container that is intended only for your immediate use, you do not have to label the portable container. Pipes or piping systems and their contents will be described in the training sessions.

We will ensure that all containers of hazardous materials we receive have labeling in compliance with MIOSHA's Hazard Communication Standard.

In addition, we will make certain that all our trucks carrying hazardous chemicals have appropriate warning placards in accordance with US Department of Transportation's Hazardous Materials Regulations (MIOSHA R325.77003).

#### **Non-Routine Tasks**

When your job requires you to perform hazardous non routine tasks (e.g., cleaning tanks, entering confined spaces, etc.), you will receive special training to inform you about the hazardous chemicals to which you might be exposed and the proper precautions you should take to reduce or avoid exposure.

#### **Training**

[Name of Municipality] will make certain that everyone who works with or has potential exposure to hazardous chemicals receives training on the Hazard Communication Standard and the safe use of those hazardous chemicals before they report to work.

[Name of Municipality] has developed a program for this purpose. Whenever a new hazard is introduced, you will receive additional training. Your department head will use regular safety meetings to review the information presented in the initial training. Department heads and supervisors will receive extensive training regarding hazards and appropriate protective measures so they will be available to answer your questions and provide daily monitoring of safe work practices.

Training will emphasize the following:

- The contents of MIOSHA's Hazard Communication Standard and this written program.
- Chemical and physical properties of hazardous materials (e.g., flash point, reactivity) and methods you can use to detect the presence or release of chemicals (including chemicals in unlabeled pipes).
- Physical hazards of chemicals (e.g., potential for fire, explosion, etc.).
- Health hazards, including signs and symptoms of exposure, associated with exposure to chemicals and any medical condition known to be aggravated by exposure to the chemical.
- Procedures to protect against hazards (e.g., personal protective equipment required, proper use, and maintenance; work practices or methods to assure proper use and handling of chemicals; and procedures for emergency response).
- Work procedures to follow to assure protection when cleaning hazardous chemical spills and leaks.
- Where MSDSs are located, how to read and interpret the information on both labels and MSDSS, and how employees may obtain additional hazard information.

The safety director or designee will review our training program for employees and advise department heads and supervisors on training or retraining needs. The Hazard Communication Standard requires retraining when the hazard changes or when a new hazard is introduced into the workplace. However, it is company policy to provide training regularly in safety meetings to ensure the effectiveness of the program. As part of the assessment of the training program, the safety director will obtain input from employees regarding the training they have received and their suggestions for improving it.

#### Contractor Employers

The safety director, upon notification by the responsible supervisor, will personally advise outside contractors of

- any chemical hazards to which they may have exposure in the normal course of their work on the premises.
- the labeling system in use,
- the protective measures they should take, and
- required safe handling procedures.

In addition, the safety director will notify these individuals of the location and availability of MSDS's.

Each contractor bringing chemicals on-site must provide us with the appropriate hazard information on these substances, including the labels used and the precautionary measures to be taken in working with these chemicals.

#### **Additional Information**

All employees, or their designated representatives, can obtain further information on this written program, the hazard communication standard, applicable MSDS's, and chemical information lists at [designated location].

### Name of Municipality (and/or Department): List of Hazardous Chemicals

Hazardous Chemicals	Operation/Area Used	MSDSs on File

### **Material Safety Data Sheet (MSD'S)**

#### Overview

The Material Safety Data Sheet (MSDS) is a detailed information bulletin that the manufacturer or importer of a chemical prepares. It describes the following:

- physical and chemical properties,
- physical and health hazards,
- routes of exposure,
- precautions for safe handling and use
- emergency and first-aid procedures
- control measures.

The information on an MSDS aids in the selection of safe products. It also helps prepare employers and employees to respond effectively to daily exposure situations as well as to emergencies.

Because MSDS's are a comprehensive source of information for all types of employers, they may contain information that is not useful to you or not important to the safety and health in your particular operation. Concentrate on the information that is applicable to your situation. Generally, hazard information and protective measures should be your major concern.

#### **MIOSHA** Requirements

Employers must maintain a complete and accurate MSDS for each hazardous chemical that they use. If there are multiple suppliers of the same chemical, there is no need to retain multiple MSDS's for that chemical.

The manufacturer or distributor must automatically provide this information when shipping hazardous chemicals to employers. When new and significant information becomes available about a product's hazards or ways to protect against them, chemical manufacturers, importers, or distributors must add it to their MSDS within three months and provide it to their customers with the next shipment of the chemical.

While the standard does not require that MSDS's be physically attached to a shipment, they must accompany or precede the shipment. When the manufacturer or supplier does not send an MSDS with a shipment labeled as a hazardous chemical, the employer must obtain one from the chemical manufacturer, importer, or distributor as soon as possible. Similarly, if the MSDS is incomplete or unclear, the employer should contact the manufacturer or importer to get clarification or obtain missing information.

When an employer is unable to obtain an MSDS from a supplier or manufacturer, he/she should submit a written complaint, with complete background information, to the nearest MIOSHA office. MIOSHA will contact the supplier or manufacturer to obtain the needed information. If the supplier or manufacturer still fails to respond within a reasonable time, MIOSHA will inspect the supplier or manufacturer and take appropriate enforcement action.

#### **Sections of an MSDS & Their Importance**

MIOSHA (OSHA) specifies the information that the manufacturer must include on an MSDS. MIOSHA does not, however, prescribe the precise format for an MSDS. OSHA has issued a non-mandatory MSDS form that meets the Hazard Communication Standard requirements. Manufacturers can use this form as is or expand it as necessary. The MSDS must be in English and must include at least the following information.

#### **Section 1. Chemical Identity**

- The sheet must provide the chemical and common name(s) for single chemical substances.
- The sheet must cross-reference the identity on the MSDS to the identity found on the label.

#### Section 2. Hazardous Ingredients

- For a hazardous chemical mixture that has been tested as a whole to determine its hazards, the chemical and common names of the ingredients that are associated with the hazards, and the common name of the mixture must be listed.
- If the chemical is a mixture that has not been tested as a whole, the chemical and common names of all ingredients determined to be health hazards and comprising 1 percent or more of the composition must be listed.
- Chemical and common names of carcinogens must be listed if they are present in the mixture at levels of 0.1 percent or greater.
- All components of a mixture that have been determined to present a physical hazard must be listed.
- Chemical and common names of all ingredients determined to be health hazards and comprising less than 1 percent (0.1 percent for carcinogens) of the mixture must also be listed if they can still exceed an established Permissible Exposure Limit (PEL) or Threshold Limit Value (TLV) or present a health risk to exposed employees in these concentrations.

#### Section 3. Physical and Chemical Characteristics

The MSDS must list the physical and chemical characteristics of the hazardous substance. These include items such as boiling and freezing points, density, vapor pressure, specific gravity, solubility, volatility, and the product's general appearance and odor. These characteristics provide important information for designing safe and healthful work practices.

#### Section 4. Fire and Explosion Hazard Data

The MSDS must:

- Describe the compound's potential for fire and explosion.
- Identify the fire hazards of the chemical and the conditions under which it could ignite or explode.
- Describe recommended extinguishing agents and fire-fighting methods.

#### Section 5. Reactivity Data

This section gives information about other chemicals and substances with which the chemical is incompatible, or with which it reacts.

The section must include information on any hazardous decomposition products, such as carbon monoxide.

#### Section 6. Health Hazards

Section VI must list the acute and chronic health hazards of the chemical, together with signs and symptoms of exposure. In addition, it must list any medical conditions that exposure to the compound can aggravate.

#### The standard specifies the following types of chemical health hazards:

- carcinogens,
- corrosives,
- toxins,
- irritants,
- sensitizers,
- mutagens,
- teratogens, and
- effects on target organs (i.e., liver, kidney, nervous system, blood, lungs, mucous membranes, reproductive system, skin, eyes, etc.).
- The route of entry section describes the primary pathway by which the chemical enters the body. There are three principal routes of entry: inhalation, skin, and ingestion.
- This section of the MSDS supplies the OSHA PEL, the ACGIH TLV, and other exposure levels used or recommended by the chemical manufacturer.
- If the compound is listed as a carcinogen (cancer-causing agent) by OSHA, the National Toxicology Program (NTP), or the International Agency for Research on Cancer (IARC), the MSDS must provide this information.

#### Section 7. Precautions for Safe Handling and Use

The standard requires the preparer to describe the precautions for safe handling and use. These include recommended industrial hygiene practices, precautions employees should take during repair and maintenance of equipment, and procedures for cleaning up spills and leaks. Some manufacturers also use this section to include useful information not specifically required by the standard, such as EPA waste disposal methods and state and local requirements.

#### **Section 8. Control Measures**

The standard requires the preparer of the MSDS to list any generally applicable control measures. These include engineering controls, safe handling procedures, and personal protective equipment. Information is often included on the use of goggles, gloves, body suits, respirators, and face shields.

#### **Employer Responsibilities**

- Employers must assure that each employee has a basic knowledge of how to find information on an MSDS and how to properly make use of that information. Employers also must assure the following:
- Complete and accurate MSDS's are made available during each work shift to employees when they are in their work areas.
- Information is provided for each hazardous chemical.

#### A Sample MSDS follows:

AGA GAS -- CARBON MONOXIDE MATERIAL SAFETY DATA SHEET

NSN: 6830011038438

Manufacturer's CAGE: 09785

Part No. Indicator: A

Part Number/Trade Name: CARBON MONOXIDE

\_\_\_\_\_

General Information

\_\_\_\_\_\_

Company's Name: AGA GAS INC

Company's Street: 6225 OAKTREE BLVD Company's City: CLEVELAND

Company's State: OH Company's Country: US

Company's Zip Code: 44131-5000 Company's Emerg Ph #: 216642-6600 Company's Info Ph #: 216-642-6600

Distributor/Vendor # 1: IWECO Distributor/Vendor # 1 Cage: 03XZ9

Record No. For Safety Entry: 001

Tot Safety Entries This Stk#: 003 Status: SE

Date MSDS Prepared: 01APR92 Safety Data Review Date: 17APR96

Preparer's Company: AGA GAS INC

Preparer's St Or P. O. Box: 6225 OAKTREE BLVD

Preparer's City: CLEVELAND Preparer's State: OH Preparer's Zip Code: 44131-5000

**MSDS Serial Number: BZFYK** 

\_\_\_\_\_\_

Ingredients/Identity Information

\_\_\_\_\_\_

Proprietary: NO

Ingredient: CARBON MONOXIDE
Ingredient Sequence Number: 01

NIOSH (RTECS) Number: FG3500000

CAS Number: 630-08-0
OSHA PEL: 55 MG/CUM
ACGIH TLV: 57 MG/CUM

Other Recommended Limit: 50 PPM

\_\_\_\_\_

Physical/Chemical Characteristics

Appearance And Odor: COLORLESS, ODORLESS GAS.

Boiling Point: -312.7F

Vapor Pressure (MM Hg/70 F): -337.1F

Specific Gravity: 0.96

Solubility In Water: SLIGHT

\_\_\_\_\_\_

Fire and Explosion Hazard Data

Lower Explosive Limit: 12.5 Upper Explosive Limit: 74

Extinguishing Media: WATER, DRY CHEMICAL, CO2.

Special Fire Fighting Proc: STOP THE FLOW OF CO. USE WATER SPRAY TO COOL

SURROUNDING CONTAINERS.

Unusual Fire And Expl. Hazards: CO HAS ALMOST THE SAME DENSITY AS AIR. IT

WON'T DIFFUSE BY RISING AS W/SOME LIGHTER FLAMMABLES SUCH AS HYDROGEN/

NATURAL GAS (METHANE). AUTOIGNITION TEMP=1166F.

\_\_\_\_\_\_

Reactivity Data

\_\_\_\_\_\_

Stability: YES

Cond To Avoid (Stability): CONDITIONS >125F, SOURCES OR IGNITION.

Materials To Avoid: OXIDIZERS

Hazardous Decomp Products: NONE

Hazardous Poly Occur: NO

\_\_\_\_\_\_

Health Hazard Data

\_\_\_\_\_

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: INHALATION: OXYGEN TRANSPORT FUNCTION OF THE

HEMOGLOBIN OF THE BLOOD IS REDUCED SINCE IT REACTS W/INHALED CO TO FORM

CARBOXY HEMOGLOBIN INSTEAD OF ITS NORMAL REACTION W/THE OXYGEN IN THE

LUNGS

FORMING OXYHEMOGLOBIN. THE AFFINITY OF HEMOGLOBIN FOR CO IS 200-300 TIMES

GREATER THAN ITS AFFINITY FOR OXYGEN. (SEE SUPP)

Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO

**Explanation Carcinogenicity: NONE** 

Signs/Symptoms Of Over exp: HEADACHE, DIZZINESS, HEART PALPITATIONS, WEAKNESS, CONFUSION, NAUSEA, CONVULSIONS, UNCONSCIOSNESS.

Med Cond Aggravated By Exp: PERSONS IN ILL HEALTH WHERE SUCH ILLNESS WOULD BE AGGREVATED BY EXPOSURE TO CO SHOULDN'T BE ALLOWED TO WORK W/HANDLE PRODUCT.

Emergency/First Aid Proc: INHALATION: IF CONSCIOUS ASSIST TO AN UNCONTAMINATED AREA & TREAT W/SUPPLEMENTAL OXYGEN. IF UNCONSCIOUS REMOVE TO

UNCONTAMINATED AREA & GIVE ASSISTED RESPIRATION & OXYGEN AT THE SAME TIME.

OBTAIN MEDICAL ATTENTION IN ALL CASES. PHYSICIAN SHOULD BE INFORMED THAT

PATIENT HAS INHALED TOXIC QUANTITIES OF CO.

\_\_\_\_\_\_

Precautions for Safe Handling and Use

\_\_\_\_\_\_

Steps If Material Released/Spill: EVACUATE ALL PERSONNEL FROM AREA. USE APPROPRIATE PROTECTIVE EQUIPMENT. IF LEAK IS IN USER'S EQUIPMENT, BE CERTAIN TO PURGE PIPING W/INERT GAS PRIOR TO ATTEMPTING REPAIRS. IF LEAK IS IN CONTAINER/CONTAINER VALVE CONTACT CLOSEST SUPPLIER.

Waste Disposal Method: DON'T ATTEMPT TO DISPOSE OF WASTE/UNUSED QUANTITIES. RETURN IN THE SHIPPING CONTAINING PROPERLY LABELED, W/ANY VALVE

OUTLET PLUGS/CAPS SECURED & VALVE PROTECTION CAP IN PLACE TO SUPPLIER.

DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS. UN 1016

Precautions-Handling/Storing: USE ONLY IN WELL-VENTILATED AREAS. VALVE PROTECTION CAPS MUST REMAIN IN PLACE UNLESS CONTAINER IS SECURED W/VALVE OUTLET PIPED TO USE POINT.

Other Precautions: DON'T DRAG, SLIDE/ROLL CYLINDERS. USE SUITABLE HAND TRUCK FOR CYLINDER MOVEMENT. USE PRESSURE REDUCING REGULATOR WHEN CONNECTING CYLINDER TO LOWER PRESSURE

### **Material Safety Data Sheet Checklist**

		YES	NO
You	must ensure that each MSDS contains the following information:		
1.	Product or chemical identity used on the label.	π	π
2.	Manufacturer's name and address.	π	π
3.	Chemical and common names of each hazardous ingredient.	$\pi$	π
4.	Name, address, and phone number for hazard and emergency information.	π	π
5.	Preparation or revision date.	π	$\pi$
6.	The hazardous chemical's physical and chemical characteristics, such as vapor pressure and flash point.	π	π
7.	Physical hazards, including the potential for fire, explosion, and reactivity.	π	π
8.	Known health hazards.	π	π
9.	MIOSHA/OSHA permissible exposure limit (PEL), ACGIH threshold limit value (TLV) or other exposure limits.	π	π
10.	Emergency and first aid procedures.	π	π
11.	Whether OSHA, NTP or IARC lists the ingredient as a carcinogen.	π	π
12.	Precautions for safe handling and use.	π	π
13.	Control measures such as engineering controls, work practices, hygienic practices or personal protective equipment required.	π	π
14.	Primary routes of entry.	$\pi$	π
15.	Procedures for spills, leaks, and clean up.	π	π

### Sample Letter for Requesting an MSDS

[Date]
{Company Name] [Street Address] [City, State Zip]
Dear Sir:
The Michigan Occupational Safety and Health Act Hazard Communication Standard (R325.77001) requires employers be provided Material Safety Data Sheets (MSDS's) for all hazardous substances used in their facility, and to make these MSDS's available to employees potentially exposed to these hazardous substances.
We, therefore, request a copy of the MSDS for your product listed as Stock # We did not receive an MSDS with the initial shipment of the [product name] we received from you on [date].
We also request any additional information, supplemental MSDS's, or any other relevant data that your company or supplier has concerning the safety and health aspects of this product.
Please consider this letter as a standing request to your company for any information concerning the safety and health aspects of using this product that may become known in the future.
The MSDS and any other relevant information should be sent to us within 10, 20, 30 days (appropriate time). Delays in receiving the MSDS information may prevent use of your product. Please send the requested information to [individual's Name], Safety Director, (name of municipality, address, city, state, zip code).
Please be advised that if we do not receive the MSDS on the above chemical by [Date], we may have to notify MIOSHA of our inability to obtain this information. It is our intent to comply with all provisions of the Hazard Communication Standard (R325.77001) and the MSDS's are essential to this effort.
Your cooperation is greatly appreciated. Thank you for your timely response to this request. If you have any questions concerning this matter, please contact [individual's Name] at [area code + telephone number].
Sincerely,
, (Title)
Name of Municipality

### **Training Checklist**

		Yes	No
1.	Thorough training program in place?		
2.	Identified employees who need training?		
3.	Training program assures that new employees receive training		
1	before their first assignment? Program informs employees of the specific information and		
4.	training requirements of the Hazard Communication Standard?	_	_
5.	Program informs employees of the requirements of the standard,		
J.	and their rights under the law?	_	_
6.	Program informs employees of our written program and training		
	requirements?		
7.	Training informs employees of the different types of chemicals and		
•	and the hazards associated with them?		_
8.	Training informs employees of specific hazards of the chemicals and		
^	processes they work with and their proper use and handling?		
9.	Training informs employees of the hazards associated		
10.	with performing non routine tasks? Employees know how to detect the presence or release of hazardous		
10.	chemicals in the workplace?	_	_
11.	Program provides training in the use of proper work practices, personal		
	protective equipment and clothing, and other controls to reduce or		
	eliminate employee exposure to the chemicals in their work areas?		
12.	Employees receive training in emergency and first aid procedures		
	and signs of overexposure?		
13.	Have a list of all the hazardous chemicals in our workplace.		
14.	Employees responsible know when and how to update hazardous		
4-	chemical list?		_
15.	Have obtained or developed a material safety data sheet for each		
16	hazardous chemical in the workplace?		
16. 17.	Training explains how to use an MSDS? Employees receive information about the list of hazardous		
17.	chemicals and MSDSs and where they are located?		_
18.	Training explains labels and their warnings to employees?		
19.	Program includes a system to assure that employees check all incoming		_
10.	hazardous chemicals for proper labels and data sheets?	_	_
20.	Program establishes procedures to ensure proper labeling or		
	warning signs for containers that hold hazardous chemicals?		
21.	Program includes procedures for identifying and informing		
	employees of new hazardous chemicals before the chemicals		
	are introduced into a work area?		
22.	Procedures exist for informing employees of new hazards associated		
	with the chemicals they already use?		
23.	Program includes method for evaluating the effectiveness of the		
	training program and to keep track of who has received training?		