NEW YORK STATE
DEPARTMENT OF LABOR

"WHAT TO DO"

(HAZARD COMMUNICATION)
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STEP 1

DETERMINE WHO IS RESPONSIBLE FOR
IMPLEMENTING THESE
LAWS IN YOUR WORKPLACE

NAME: ____________________________________________

TITLE ____________________________________________

STEP 2

MAKE A LIST OF ALL CHEMICALS (MATERIALS)
IN THE WORKPLACE (IDENTIFY FROM PRODUCT LABEL)
(COLUMN 1 ON PAGE 2)

Examples of types of chemicals commonly found -

- small and large cans and bottles, bags, boxes, containers, cylinders, drums, tanks, bulk, tank cars -
- paints, glues, solvents, strippers, welding material, welding rods, cleaning materials (sanitary), flammable materials, combustible liquids, explosives, powders, dust, metals, compressed gases, acids, bases (caustics), oils, abrasives, "chemicals", gases, pesticides.
## Chemical List of All Materials in the Workplace

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STEP 3

ADD CHEMICALS PRODUCED IN YOUR WORKPLACE TO THE LIST

• Examples of such are:
  Carbon monoxide from lift trucks, etc.
  Welding fumes
  Wood dust
  Hydrogen cyanide where cyanide plating is done.

STEP 4

OBTAIN CURRENT MATERIAL SAFETY DATA SHEETS (MSDS)
FROM SUPPLIERS FOR ALL CHEMICALS

• If a material is not hazardous, the supplier must provide a statement to that effect.

• Consumer use exemption: An MSDS is not needed for products whose use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended.

• Generic MSDS for chemicals produced in the workplace must also be obtained.

On line sources include:

http://www.atsdr.cdc.gov
http://www.cdc.gov/niosh/
http://hazard.com/msds
STEP 5

DETERMINE WHICH CHEMICALS ARE HAZARDOUS

(CHECK COLUMN 2 or 3, PAGE 2)

• A Material Safety Data Sheet tells you if a chemical is hazardous.

• Hazardous chemicals are designated as health and/or physical hazards.

• Chemicals which are health hazards are those which are potential cancer producers, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, chemicals which damage the liver, kidneys, nervous system, blood, lungs, skin, and eyes or mucous membranes.

• Chemicals which are physical hazards are combustible liquids, compressed gases, explosives, flammables, organic peroxides, oxidizers, pyrophoric materials, and unstable or water reactive materials are considered physical hazards.
STEP 6

INSURE THAT ALL CONTAINERS ARE

PROPERLY LABELED, TAGGED OR MARKED.

- Proper labels should indicate:
  a. Identity of hazardous chemicals.
  b. Appropriate hazard, i.e., the specific organ affected (may cause lung damage. Irritates skin. Causes dizziness.)
  c. Name and address of the chemical manufacturer, importer, or other responsible party.
  d. See examples in Appendix A - "Suggested Label/Training Content"
STEP 7
PREPARE A WRITTEN HAZARD COMMUNICATION PROGRAM

I. General

The purpose of this instruction is to ensure that the above facility is in compliance with the OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200.

_____________________________ , referred to in this program as the Program Administrator, is the overall coordinator of the facility program acting as the representative of ____________________________ (Senior Facility Official), who has overall responsibility.

In general, each employee in the facility will be apprised of the substance of the HCS, the hazardous properties of chemicals they work with, and measures to take to protect themselves from these chemicals.

II. List of Hazardous Chemicals

The Program Administrator will maintain a list of all hazardous chemicals used in the facility, and update the list as necessary, such as when new hazardous chemicals are received at the facility. The list of hazardous chemicals is maintained at ____________________________.

III. Material Safety Data Sheets (MSDS's)

The Program Administrator will maintain an MSDS library on every substance on the list of hazardous chemicals at ____________________________ . The MSDS will consist of a fully completed OSHA Form 174 or equivalent. The Program Administrator will ensure that each work area or shop maintains an MSDS for hazardous materials used in that area. MSDS's will be readily available to all employees.

The Program Administrator is responsible for acquiring and updating MSDS's. The Program Administrator will review each MSDS for accuracy and completeness and will consult with the ____________________________ (Senior Facility Official) if additional research is necessary. All new procurements for the facility must be cleared by the Program Administrator. Whenever possible, the least hazardous substance will be procured.

MSDS's that meet the requirements of the HCS must be received at the facility either prior to, or at the time of receipt of the first shipment of any potentially hazardous chemical purchased from a vendor. It may be necessary to discontinue procurements from vendors failing to provide approved MSDS's in a timely manner.

IV. Labels and Other Forms of Warning

_____________________________ , referred to in this program as the Labeling Coordinator, is designated to ensure that all hazardous chemicals in the facility are properly labeled. Labels should list the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer or other responsible party. The Labeling Coordinator will refer to the corresponding MSDS to verify label information. Immediate use containers, small
containers into which materials are drained for use on that shift by the employee drawing the material, do not require labeling. To meet the labeling requirements of the HCS for other in-house containers, refer to the label supplied by the manufacturer. All labels for in-house containers will be approved by the Labeling Coordinator prior to their use. The Labeling Coordinator will check on a monthly basis to ensure that all containers in the facility are labeled and that the labels are up to date.

V. Training

Each employee who works with or is potentially exposed to hazardous chemicals will receive initial training on the HCS and the safe use of those hazardous chemicals. Additional training will be provided for employees whenever a new hazard is introduced into their work areas. Hazardous chemical training is conducted by _____________________________. (Attach copy of course outline, training schedules, and a description of course materials).

The training will emphasize these elements:

- A summary of the standard and this written program;
- Hazardous chemical properties including visual appearance and odor and methods that can be used to detect the presence or release of hazardous chemicals;
- Physical and health hazards associated with potential exposure to work place chemicals;
- Procedures to protect against hazards, e.g., personal protective equipment, work practices, and emergency procedures;
- Hazardous chemical spill and leak procedures; and
- Where MSDS's are located, how to understand their content, and how employees may obtain and use appropriate hazard information.

The Program Administrator will monitor and maintain records of employee training and advise the facility manager on training needs.

VI. Contractor Employers

The Program Administrator, upon notification from supervisors or other personnel, will advise outside contractors of any chemical hazards which may be encountered in the normal course of their work on the premises.

VII. Non-Routine Tasks

Supervisors or other personnel contemplating a non-routine task, e.g., boiler repair, will consult with the Program Administrator and will ensure that employees are informed of chemical hazards associated with the performance of these tasks and appropriate protective measures. This will be accomplished by a meeting of supervisors and the Program Administrator with affected employees before such work is begun.

VIII. Additional information

Further information on this written program, the HCS, and applicable MSDS's is available at _____________________________. (location/telephone number).
STEP 8

TRAIN THE EMPLOYEES ABOUT
THE HAZARDOUS CHEMICALS WITH WHICH THEY WORK
OR TO WHICH THEY MAY BE EXPOSED

* The worker should be able to verbally recall the following basic
  information about each hazardous material, in simple language:

  **EMPLOYEE RECALL**

  HAZARD COMMUNICATION

1. Requirements of the information training section.
2. What hazardous chemical(s) the worker is/or may be exposed to during
   normal use or in a foreseeable emergency.
3. Where is this chemical present?
4. Effect on the body.
5. Detection.
6. Protection
7. Written programs and MSDS.

* Use the MSDS for training.
Appendix A
SUGGESTED LABEL/TRAINING CONTENT

PAINTING & COATING

• May cause irritation of skin, eyes, nose and throat
• May cause headache, nausea and dizziness
• May cause nervous system disorders
• May be reproductive hazard
• May cause allergic sensitization of
  skin/respiratory tract
  Some materials may be carcinogenic
• Very high levels may cause unconsciousness and death
• These materials can be flammable or highly flammable

COMPRESSED GASES

• Vessel rupture may result in a missile reaction
• Concentrated streams may cause skin rupture and body damage
• May result in toxic effects specific to each gas
• May cause asphyxiation in confined spaces

CARBON MONOXIDE

• May cause dizziness, nausea or a headache
• Excessive exposure may cause unconsciousness and death
• May aggravate heart and artery diseases

WOOD DUST

Short Term Exposure may cause:
• Irritation of eyes, nose, throat & lungs
• Allergies

Long term Exposure may cause:
• Accumulation in lungs
• Cancer (Hardwood)
• Asthma and related problems (Hardwood)

WELDING

• Fumes and gases may cause irritation of the eyes, nose and throat
• Fumes and gases may cause chest pain/pulmonary edema
• Fumes and gases may cause chronic lung diseases/lung cancer
• Fumes and cases may cause metal fume fever/lead poisoning
• Polyester and other man-made fibers may melt and cause severe burns if struck by a welding spark
• May result in asphyxiation in confirmed spaces

GENERAL EFFECTS OF CHEMICALS

Short term (acute) effects may include:
  Burns from flammable materials
  Eyes, nose, throat, lung irritation or injury
  Dry skin or dermatitis
  Nausea (sick feeling)
  Vomiting
  Fever
  Nervous system effects (i.e., dizziness, headache, highs)
  Unconsciousness
  Death

Long Term (chronic) effects may include:
  Damage to liver, kidney, stomach, central nervous system, muscles, brain, blood, bones and lungs
  Sensitization
  Cancer
  Birth defects
  Reproductive effects
  Death
Appendix A
SUGGESTED LABEL/TRAINING CONTENT

ORGANIC SOLVENTS

Short term exposure may cause:

Low Levels -
- Irritation of eye, nose and throat
- Skin irritation/disease
- Headache, nausea, or light-headedness

High Levels -
- Unconsciousness or coma
- Sudden collapse
- Death

Long term exposure may cause these additional problems:
- Nervous system damage
- Blood disorders
- Permanent eye damage/blindness

HALOGENATED SOLVENTS AND VAPOR DEGREASERS

Short term exposure may causes:

Low levels -
- Irritation of eyes, nose and throat
- Skin irritation/disease
- Headache, nausea or light-headedness

High Levels -
- Dizziness, drowsiness
- Unconsciousness
- Death

Long term exposure may cause these additional problems:
- Permanent nervous systems damage
- Some of these materials may be carcinogenic
- High exposure to heat or flames may release toxic gases

POLYNUCLEAR AROMATIC HYDROCARBONS (PAH)

- PAH may be contained in coal tar pitch products, asphalt products, untreated oils and greases, byproducts of overheating and burning hydrocarbon oils and emissions from coke ovens
- May cause skin and eye irritation
- Can cause skin and lung cancer
- Some of these materials may be carcinogenic
- Exposed skin should be kept out of sunlight (sunlight worsens effect)

LEAD

May cause:

Lower Levels -
- Headache
- Joint and muscle pain
- Abdominal cramping

High Levels -
- Anemia
- Kidney disease
- Damage to nervous system

Very High Levels -
- Seizures - coma - death
- May be reproductive hazard

SILICA

- May cause silicosis (scarring of the lungs)
- May cause lung cancer
- Exposure is usually associated with inhalation of silica dust particles

ASBESTOS & FIBERGLASS

- May cause cancer of lung and digestive tract/throat, kidney
- May cause asbestosis/scarring of the lungs
- May cause skin irritation
- Exposure is usually associated with inhalation of fibers

METALWORKING FLUIDS

- May cause skin, eye, nose, and throat irritation
- May cause skin rash, red eyes, cough or sneezing and respiratory problems
- May cause bacterial infections
- Some materials may be carcinogenic
- May cause skin, colon and stomach cancer

DIISOCYANATES

- May cause irritation of the eyes, skin, nose and throat
- May cause allergic breathing problems
- Allergic sensitization may occur
- Some of these materials may be carcinogenic
Appendix A
SUGGESTED LABEL/TRAINING CONTENT

CAUSTICS & ACIDS

- Skin contact may cause severe burns/delayed burns/skin ulcers
- Eye exposure causes blindness
- Inhalation may cause respiratory problems, nasal damage
- Ingestion may burn throat and stomach
- Chromic acid may be carcinogenic
- These materials are highly reactive. Improper mixing may cause fire or explosions.

GLYCOL, ETHERS & ACETATES

- Can pass directly through the skin into bloodstream
- May be reproductive hazard
- May cause kidney injury
- May cause blood disorders/anemia
- May cause headaches and drowsiness
- These compounds do not have strong odors and cannot be detected by smell at hazardous levels.

ADHESIVES

- May cause irritation of eye, nose, throat and lungs
- May cause skin rash and allergic reactions
- May cause respiratory allergies
- Liquid resins may contain flammable solvents
- Glycidyl ethers are a possible carcinogenic.
- Allergic sensitization may occur

PLASTICS & POLYMERS

- May cause skin rash and respiratory irritation
- May use skin and respiratory allergies
- May cause eye irritation
- These problems may occur from direct contact or through dust or vapors in the air
- Burning or heating may produce hazardous vapors or smoke.
- Allergic sensitization may occur

ALDEHYDES, AMINES & AMIDES

- May cause irritation or burns of the skin, eyes, nose, throat, and lungs
- May cause allergic reactions
- May cause nervous system or internal organ damage
- Allergic sensitization may occur
- Some of these chemicals are easily absorbed through the skin.
NOTICE TO PUBLIC EMPLOYERS
Hazard Communication Standard and Right to Know Law

The New York State Department of Labor is conducting an inspection of your establishment to determine your compliance with the Public Employee Safety and Health (PESH) Act, Section 27-a of the New York Labor Law, and adopted standards including the Hazard Communication Standard. One of the purposes of the Hazard Communication Standard is to ensure that information concerning the hazards from chemicals known to be in the workplace is transmitted to employees who may be exposed to them under normal conditions of use or in a foreseeable emergency.

You are also subject to the provisions of Article 28 of the New York Labor Law, the "Right-to-Know Law", and regulations promulgated pursuant to that statute by the Commissioner of Labor. The "Right-to-Know Law" guarantees employees the right to information, training and education regarding toxic substances in the workplace. The provisions of the "Right-to-Know Law" and regulations (12 NYCRR Part 820) govern subjects similar to those covered by the Hazard Communication Standard, and the requirements of the two laws in certain instances are similar, but there are three areas in which the "Right-to-Know Law" and regulations impose additional obligations on employers:

1) Section 876 of the Labor Law requires, in part, that every employer must post a sign in every workplace informing employees that they have a right to information from their employer regarding (1) the toxic substances found in that workplace, (2) a description of the toxic effects of these substances, and (3) the circumstances under which these toxic effects are produced.

2) Section 878 of the Labor Law requires, in part, that employers must provide education and training programs for employees routinely exposed to toxic substances. Such education and training must be given prior to the initial assignment of employees and must be repeated annually thereafter.
(3) Section 879 of the Labor Law requires, in part, that employers keep a record of the name, address, and social security number of every employee who handles or uses substances listed in Subpart Z of 29 CFR 1910. These records shall be made available to affected employees, former employees, a designated physician, or a representative of the Commissioner of Health. The records must be maintained for forty years. If the employer ceases operation in New York State the records are to be sent to the Department of Health.

In the course of inspecting your establishment for compliance with the Hazard Communication Standard, the PESH inspector will also inspect for compliance with the Right-to-Know Law and regulations. If the establishment is not in compliance with the Right-to-Know Law or regulations, you will be given a copy of a "Right-to-Know Compliance Checklist".

If you have been given a Checklist, then after the PESH Bureau's inspection for compliance with the Hazard Communication Standard has been completed, a copy of the Checklist identifying any uncomplied inspection findings will be forwarded to the Counsel's Office of the New York State Department of Labor, which, along with the New York State Attorney General's Office, enforces compliance with the Right-to-Know Law and regulations, and the Public Employee Safety and Health Act. The Counsel's Office will communicate with you regarding compliance with these requirements, if necessary.