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Health/Safety/Risk Management serves over 50 school districts in eight counties. We also assist colleges, universities, and municipalities on a fee for service basis. We offer training courses to the public on asbestos handling, inspection, and confined space entry.
This handbook is intended to alert the school district’s employees to the potential hazards of the workplace and to identify the persons to contact and the procedures to follow if a problem should arise. Your supervisor will assist you in identifying the products and hazards appropriate to your specific work location.

By reading this booklet and signing the enclosed acknowledgement form, the employee acknowledges he/she has been informed of their rights and that the district has fulfilled the requirements of the federal (OSHA) Hazard Communication Standard, Exposure to Bloodborne Pathogens Standard and the New York State (DOL) Right-to-Know Law.

### PLAN LOCATIONS

**Hazard Communication Written Plan and NYS Right-to-Know Law**

Responsible Person: 

Location: 

**Chemical Product Inventory and Material Safety Data Sheets (MSDS) [now Safety Data Sheets (SDS) under GHS 2012]**

Responsible Person: 

Location: 

**Exposure Control Plan (Bloodborne Pathogens Standard)**

Responsible Person: 

Location: 

**School Safety Plans (SAVE)**

Responsible Person for District-wide Plan: 

Location: 

*Note: Building-level plans are confidential.*
EMPLOYEE RIGHTS

The overall intent of “Right-to-Know” legislation is to provide employees with information about the known and suspected health hazards that may result from working with toxic substances. The employees have a legal right to this information. This assists them in making knowledgeable and reasoned decisions with respect to any personal risks of their employment and the need for corrective action.

Employees have the right to:

1. Have access to information, including the HAZCOM written plan, Inventory, and MSDS/SDS file.
2. Make photocopies of the information to keep on hand in their department.
3. Be informed of the hazardous products used in their jobs by reviewing the inventory.
4. Be informed of the potentially hazardous ingredients found in those products (see MSDS/SDS).
5. Be informed of the hazards associated with overexposure to those ingredients (including health hazards, fire hazards, etc.).
6. Be informed of the specific proper procedures for handling those products containing potentially harmful ingredients.
7. Be provided with protective gear, ventilation and proper equipment when needed.
8. Refuse to work with a toxic substance if they have not been provided with the MSDS/SDS. In the event the employer does not possess an MSDS/SDS for a specific substance for which a good faith effort has been made to secure an MSDS/SDS, the employee and the employer must agree on safe handling procedures or replace the product with a safer alternative.
9. File a complaint, as a last resort, with the Department of Labor if the above conditions have not been met. The employee should first try to solve the problem with the school district before filing a complaint.
10. Be protected from discrimination as a result of their use of any of these rights under the HAZCOM Standard.
The Hazard Communication program is written to fulfill the requirements of the Occupational Safety and Health Administration (OSHA), 29 CFR 1910.1200 and to fulfill the requirements of the New York State Official Compilations of Codes, Part 820 of Title 12.

In 2012, OSHA revised the Hazard Communication Standard (HCS) to formally adopt the Globally Harmonized System (GHS), effectively changing your “Right to Know” to your “Right to Understand”. According to OSHA, the new GHS system will benefit workers by reducing confusion about chemical hazards in the workplace, facilitating safety training and improving understanding of hazards.

The GHS system requires manufacturers to label and create “safety data sheets” (SDS), formerly called material safety data sheets (MSDS), that are meant to be easier to read and understand. This system is already in use in many countries, so the revision to the federal OSHA Hazard Communication Standard will align with the GHS system that is being used internationally.

Major Changes to the Hazard Communication Standard:

- **Hazard classification**: Chemical manufacturers and importers are required to determine the hazards of the chemicals they produce or import. Hazard classification under the new, updated standard provides specific criteria to address health and physical hazards as well as classification of chemical mixtures.
- **Labels**: Chemical manufacturers and importers must provide a label that includes a signal word, pictogram, hazard statement, and precautionary statement for each hazard class and category.
- **Safety Data Sheets**: The new format requires 16 specific sections, ensuring consistency in presentation of important protection information.
- **Information and training**: To facilitate understanding of the new system, the new standard requires that workers be trained on the new label elements and safety data sheet format, in addition to the current training requirements.
5 IMPORTANT STEPS TO HAZARD COMMUNICATION COMPLIANCE

1. Establish a complete and accurate Hazard Communication Written Plan.

2. Establish a labeling procedure for all departments and monitor that labeling procedure to ensure that it has been implemented correctly.

3. Establish a standard emergency procedure for dealing with chemical related accidents.

4. Compile and maintain a complete inventory for all products and chemicals that are considered potentially harmful.

5. Inform employees at least once a year, and new employees upon hiring, of all aspects of the HAZCOM and Right-To-Know Standards.

RECORDKEEPING

All training records and attendance sheets are to be kept on file for a period of forty (40) years.
HAZARD AWARENESS

You should:

- Be familiar with the materials you are working with and their hazards.
- Be aware of how to detect an accidental release of a hazardous chemical in your work area by sight, smell or monitoring devices.
- Refer to the MSDS/SDS.
- Use job instruction training.
- Avoid unnecessary exposure to all chemicals.
- Use protective equipment and clothing whenever needed.

NEW CHEMICAL PRODUCTS

When a new chemical product is introduced into your workplace, a few guidelines should be followed:

- Information in the form of a Material Safety Data Sheet, or Safety Data Sheet (as of 2012 GHS adoption), should be made available to you before you use the product.
- All Material Safety Data Sheets/Safety Data Sheets should be sent to the person responsible for maintaining the MSDS/SDS in your school.
- When you buy a product yourself for use on the job, you must obtain MSDS/SDS, review it and send a copy to the person responsible.
NON-ROUTINE TASKS

When an employee is asked to perform a task not ordinarily undertaken on the particular job and/or involving a chemical product not normally used, the employee:

- Has the right to be informed of the hazards and proper work practices regarding the chemical products being used.
- Has the right to be supplied with any protective gear necessary to use that chemical product safely.
- Should be provided with the MSDS (now SDS under GHS) on chemical products before they begin work.

These are examples of Non-Routine Tasks:

- Custodians who may be asked to help a chemistry teacher clean the chemical storage room.
- Teachers who assist the custodial staff during the summer or at any other time.

OUTSIDE CONTRACTORS

If your school district hires an outside contractor to perform work in the school district, there are certain requirements that must be met:

- Before work begins, the contractor must supply copies of MSDS/SDS for any chemical products that they may bring into the school.
- The school district must inform the contractor of any dangerous chemicals or conditions that they may encounter in the area of the school where they will work. For example, if they are going to be welding, they should be informed if flammable chemicals are nearby. Those chemicals should be removed or the contractor’s work procedures changed.
A **hazardous chemical** is any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

A **health hazard** is a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.

A **physical hazard** is a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

A **pictogram** is 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. Eight pictograms are designated under this standard for application to a hazard category.

**CHEMICAL HAZARDS**

The original Hazard Communication standard identified chemicals as only having physical or health hazards. The revised 2012 Hazard Communication standard identifies four additional types of chemical hazards.
PHYSICAL HAZARDS

A physical hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

CHEMICALS WHICH, IN CONTACT WITH WATER, EMIT FLAMMABLE GASES, are solid or liquid chemicals which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities. There are Category 1, Category 2, and Category 3 chemicals which, in contact with water, emit flammable gases.

CORROSIVE TO METALS means a chemical which by chemical action will materially damage, or even destroy, metals.

EXPLOSIVE CHEMICAL is a solid or liquid chemical which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings. Pyrotechnic chemicals are included even when they do not evolve gases. Besides dynamite, TNT, and nitroglycerine, other substances such as picric acid and lead azide are also explosive.

EXPLOSIVE ITEM is an item containing one or more explosive chemicals.

FLAMMABLE AEROSOLS means any non-refillable receptacle containing a gas compressed, liquefied, or dissolved under pressure, and fitted with a release device allowing the contents to be ejected as particles in suspension in a gas, or as a foam, paste, powder, liquid, or gas. Aerosols shall be considered for classification as flammable if they contain any component which is classified as flammable in accordance with flammable liquids, flammable gases and flammable solids. There are Category 1 and Category 2 flammable aerosols.

FLAMMABLE GAS means a gas having a flammable range with air at 20°C (68°F) and a standard pressure of 101.3 kPa (14.7 psi). There are Category 1 and Category 2 flammable gases. Examples are acetylene, hydrogen, and propane.
FLAMMABLE LIQUID means any liquid having a flashpoint at or below 199.4°F (93°C). Flash point means the minimum temperature at which a liquid gives off vapor in sufficient concentration to form an ignitable mixture with air near the surface of the liquid. Flammable liquids are divided into four categories as follows:

(i) **Category 1** includes liquids having flashpoints below 73.4°F (23°C) and having a boiling point at or below 73.4°F (23°C).
(ii) **Category 2** includes liquids having flashpoints below 73.4°F (23°C) and having a boiling point above 95°F (35°C).
(iii) **Category 3** includes liquids having flashpoints at or above 73.4°F (23°C) and at or below 149°F (60°C). When a Category 3 liquid with a flashpoint at or above 100°F (37.8°C) is heated for use to within 30°F (16.7°C) of its flashpoint, it shall be handled in accordance with the requirements for a Category 3 liquid with a flashpoint below 100°F (37.8°C).
(iv) **Category 4** includes liquids having flashpoints above 140°F (60°C) and at or below 199.4°F (93°C). When a Category 4 flammable liquid is heated for use to within 30°F (16.7°C) of its flashpoint, it shall be handled in accordance with the requirements for a Category 3 liquid with a flashpoint at or above 100°F (37.8°C).
(v) When liquid with a flashpoint greater than 199.4°F (93°C) is heated for use to within 30°F (16.7°C) of its flashpoint, it shall be handled in accordance with the requirements for a Category 4 flammable liquid.

Examples are acetone, gasoline, and toluene.

FLAMMABLE SOLID means a solid which is a readily combustible solid, or which may cause or contribute to fire through fiction. Readily combustible solids are powered, granular, or pasty chemicals which are dangerous if they can be easily ignited by brief contact with an ignition source, such as a burning match, and if the flame spreads rapidly. There are Category 1 and Category 2 Flammable Solids. Phosphorus and lithium are two examples of flammable solids.

GASES UNDER PRESSURE (formerly known as ‘Compressed Gases’) are gases which are contained in a receptacle at a pressure of 200 kPa (29 psi) (gauge) or more, or which are liquefied or liquefied and refrigerated. They comprise compressed gases, liquefied gases, dissolved gases and refrigerated liquefied gases. Some gases under pressure commonly found are acetylene, oxygen, and carbon dioxide.
**ORGANIC PEROXIDE** means a liquid or solid organic chemical which contains the bivalent –O-O- structure and as such is considered a derivative of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radicals. The term organic peroxide includes organic peroxide mixtures containing at least one organic peroxide. Organic peroxides are thermally unstable chemicals, which may undergo exothermic self-accelerating decomposition. In addition, they may have one or more of the following properties: (a) Be liable to explosive decomposition; (b) Burn rapidly; (c) Be sensitive to impact or friction; (d) React dangerously with other substances. There are several types of organic peroxides: Type A, Type B, Type C, Type D, Type E, Type F and Type G.

**OXIDIZING GAS** means any gas which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does.

**OXIDIZING LIQUID** means a liquid which, while in itself not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material. There are Category 1, Category 2, and Category 3 oxidizing liquids.

**OXIDIZING SOLID** means a solid which, while in itself is not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other material. There are Category 1, Category 2, and Category 3 oxidizing solids.

**PYROPHORIC LIQUID** means a liquid which, even in small quantities, is liable to ignite within five minutes after coming into contact with air.

**PYROPHORIC SOLID** means a solid which, even in small quantities, is liable to ignite within five minutes after coming into contact with air. Examples are titanium dichloride and phosphorus.

**SELF-HEATING CHEMICAL** is a solid or liquid chemical, other than a pyrophoric liquid or solid, which, by reaction with air and without energy supply, is liable to self-heat; this chemical differs from a pyrophoric liquid or solid in that it will ignite only when in large amounts (kilograms) and after long periods of time (hours or days). There are Category 1 and Category 2 self-heating chemicals.

**SELF-REACTIVE CHEMICALS** are thermally unstable liquid or solid chemicals liable to undergo a strongly exothermic decomposition even without participation of oxygen (air). This definition excludes chemicals classified under this section as explosives, organic peroxides, oxidizing liquids or oxidizing solids. A self-reactive chemical is regarded as possessing explosive properties when in laboratory testing the formulation is liable to detonate, to deflagrate rapidly or to show a violent effect when heated under confinement.
The definitions of flammable and combustible liquids in both the general industry and construction standards were changed to conform to the GHS modifications. In particular, the definitions of flammable liquid categories changed and deleted the term and definition of combustible liquids. This means that all flammable liquids fall into the GHS flammable liquid Categories 1 through 4, and that the term “Combustible Liquids” was deleted since the GHS does not have a hazard class titled “Combustible Liquids.” However, the GHS does require the hazard statement “combustible liquid” on the label for Category 4 Flammable liquids (flashpoint greater than 60°C (140°F) but not greater than 93°C (199.4°F)). Below is a chart that shows the comparison of the new and old flammable liquid criteria.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Flashpoint °C (°F)</td>
</tr>
<tr>
<td>Flammable 1</td>
<td>&lt; 23 (73.4)</td>
</tr>
<tr>
<td>Flammable 2</td>
<td>&lt; 23 (73.4)</td>
</tr>
<tr>
<td>Flammable 3</td>
<td>≥ 23 (73.4) and ≤ 60 (140)</td>
</tr>
<tr>
<td>Flammable 4</td>
<td>&gt; 60 (140) and ≤ 93 (199.4)</td>
</tr>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>
HEALTH HAZARDS

A *health hazard* means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.

**ACUTE TOXICITY** refers to those adverse effects occurring following oral or dermal administration of a single dose of a substance, or multiple doses given within 24 hours, or an inhalation exposure of 4 hours. There are Category 1, Category 2, Category 3 and Category 4 acute toxicity hazard categories.

**ASPIRATION HAZARD:** *Aspiration* means the entry of a liquid or solid chemical directly through the oral or nasal cavity, or indirectly from vomiting, into the trachea and lower respiratory system. Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration. Aspiration is initiated at the moment of inspiration, in the time required to take one breath, as the causative material lodges at the crossroad of the upper respiratory and digestive tracts in the laryngopharyngeal region. Aspiration of a substance or mixture can occur as it is vomited following ingestion. This may have consequences for labeling, particularly where, due to acute toxicity, a recommendation may be considered to induce vomiting after ingestion. However, if the substance, mixture also presents an aspiration toxicity hazard, the recommendation to induce vomiting may need to be modified.

**CARCINOGEN** means a substance or a mixture of substances which induce cancer or increase its incidence. Substances and mixtures which have induced benign and malignant tumors in well-performed experimental studies on animals are considered also to be presumed or suspected human carcinogens unless there is strong evidence that the mechanism of tumor formation is not relevant for humans. Classification of a substance or mixture as posing a carcinogenic hazard is based on its inherent properties and does not provide information on the level of the human cancer risk which the use of the substance or mixture may represent. There are Category 1, Category 1A, Category 1B and Category 2 carcinogen hazard categories. Benzene and chloroform are considered to be carcinogens.
GERM CELL MUTAGENICITY: A *mutation* is defined as a permanent change in the amount or structure of the genetic material in a cell. The term *mutation* applies both to heritable genetic changes that may be manifested at the phenotypic level and to the underlying DNA modifications when known (including, for example, specific base pair changes and chromosomal translocations). The term *mutagenic* and *mutagen* will be used for agents giving rise to an increased occurrence of mutations in populations of cells and/or organisms. There are Category 1, Category 1A, Category 1B, and Category 2 germ cell mutagens hazard categories.

RESPIRATORY OR SKIN SENSITIZATION: *Respiratory sensitizer* means a chemical that will lead to hypersensitivity of the airways following inhalation of the chemical. *Skin sensitizer* means a chemical that will lead to an allergic response following skin contact. There is a Category 1 Respiratory sensitizer that has two sub-categories 1a and 1b. There is a Category 1 Skin sensitizer that has two sub-categories 1a and 1b. Formaldehyde, nickel and azo dyes can sometimes cause allergic responses.

REPRODUCTIVE TOXICITY includes *adverse effects on sexual function and fertility* in adult males and females, as well as *adverse effects on development of the offspring*. Some reproductive toxic effects cannot be clearly assigned to either impairment of sexual function and fertility or to developmental toxicity. Nonetheless, chemicals with these effects shall be classified as reproductive toxicants. There are Category 1, Category 1A, Category 1B and Category 2 reproductive toxicant hazard categories.

SERIOUS EYE DAMAGE/EYE IRRITATION: *Serious eye damage* is the production of tissue damage in the eye, or serious physical decay of vision, following application of a test substance to the anterior surface of the eye, which is not fully reversible within 21 days of application. *Eye irritation* is the production of changes in the eye following the application of test substance to the anterior surface of the eye, which are fully reversible within 21 days of application. An irreversible effect on the eye is a Category 2. Reversible eye effects are classified as an Eye Irritant Category 2A.

SKIN CORROSION/IRRITATION: *Skin corrosion* is the production of irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis following the application of a test substance for up to 4 hours. Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discoloration due to blanching of the skin, complete areas of alopecia, and scars. Histopathology should be considered to evaluate questionable lesions. *Skin irritation* is the production of reversible damage to the skin following the application of a test substance for up to 4 hours. There is a Category 1 for skin corrosion that has three sub-categories of 1A, 1B and 1C. There is a Category 2 for skin irritant. Sulfuric acid and sodium hypochlorite (bleach) are corrosive. Many solvents are irritants.
SIMPLE ASPHYXIANT

A simple asphyxiant is a non-toxic or minimally toxic gas that displaces oxygen in the air, causing oxygen deprivation in those who are exposed, leading to unconsciousness and death. Examples include: Argon, Helium, Hydrogen, Methane, and Nitrogen.

PYROPHORIC GAS

Pyrophoric gas is a chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below. Examples include: Arsine, Silane, Disilane, Dichlorosilane, Diborane (borane), and Phosphine.

COMBUSTIBLE DUST

Any combustible material can burn rapidly when in a finely divided form. If such a dust is suspended in air in the right concentration, it can become explosive. Examples include: fine particles, fibers, chips, chunks or flakes of metal (aluminum and magnesium), wood, plastic, rubber, coal, flour, sugar and paper. Currently, there is no OSHA standard for Combustible Dust.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

This means an adverse physical or health effect that does not meet the specified criteria for the other chemical hazard classes addressed in this section. This is an interim label. Example: Static-accumulating liquids. AIHA is finding that certain liquids can accumulate a static charge that can serve as an ignition source for the vapor above the liquid in a storage vessel. Some fires and explosions are believed to have been caused by such a phenomenon.
TARGET ORGAN EFFECTS

Target Organ Effects occur when a chemical primarily affects one organ or system. The following are some examples.

**HEPATOTOXINS** are known to affect the liver. Some examples of chemicals that can cause this include carbon tetrachloride and nitrosamines.

**NEPHROTOXINS** are known to affect the kidneys. Examples of chemicals that can cause this damage include uranium and halogenated hydrocarbons.

**REPRODUCTIVE TOXINS** are known to affect the reproductive capabilities. The type of damage inflicted can be chromosomal damage (mutagens) and effects on the fetus (teratogens). The chemicals that can cause this include lead and DBCP (1, 2-dibromo-3-chloropropane).

**HEMATOPOIETIC AGENTS** cause disorders in one’s blood. Chemicals associated with this include carbon monoxide and cyanides.

**NEUROTOXINS** can cause problems with the central nervous system. Chemicals linked to this include mercury, and carbon disulfide.
With the 2012 revision of the Hazard Communication Standard, Material Safety Data Sheets (MSDS) will be replaced with a more comprehensive and uniformed document called the Safety Data Sheet (SDS). The SDS offers vital information about a product. It should be read before you use a product for the first time.

The SDS will consist of 16 specified sections, with each outlining a different aspect of the product. It is required to be supplied by the manufacturer, with information that the manufacturer knows from testing or experience. The following information is required to be on the SDS sheets:

1. Product Identification
2. Composition and Information on Ingredients
3. Hazard Identification
4. First Aid Measures
5. Fire Fighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. Exposure Controls – Personal Protection
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information
13. Disposal Considerations
14. Transportation Information
15. Regulatory Information
16. Other Information

*Sections 12-15 are not mandatory.*
FINDING AN MSDS/SDS

In the event you need to find an MSDS/SDS, the Capital Region BOCES subscribes to an online MSDS/SDS search program that can help. This service is free to Health/Safety/Risk Management customers. Contact your Health/Safety/Risk Management representative for the system User Name and Password.

How to find an MSDS or SDS: Go to [http://www.msdsonline.com](http://www.msdsonline.com)

Using this search:
To find a MSDS/SDS on this site you will need a User Name and Password. Please contact your Health/Safety/Risk Management representative for this information.

After you enter your User Name and Password you will be directed to the MSDS search screen.

Searching for MSDS/SDS:
- You can search for an MSDS/SDS by product type, manufacturer, or both.

- A list of products will appear on the screen. Scroll down to find the MSDS/SDS sheet that you want.
- Click on the PDF symbol next to the product name to view the MSDS/SDS sheet. You may also print the sheet from this screen.
Labels are meant to provide essential information about the hazards of using a chemical product. The label is not intended to be either the sole or most complete source of information regarding the nature or identity of hazardous chemicals in the workplace. Although the SDS is the main source of information regarding the hazards of a material, the most visible form of warning are labels, warning signs and placards. Under the revised Hazard Communication standard, all labels will be required to have:

- pictograms
- a signal word (Danger; Warning)
- hazard and precautionary statements
- the product identifier
- supplier identification

There are two types of container labels:

- **Labels on Shipped Containers:**
  Shipped Container labels must contain the product identifier, signal word, hazard statement(s), pictogram(s), precautionary statement(s), name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

- **Workplace Labels:** Workplace Labels must contain the Shipped Container Label or the product identifier and words, pictures, symbols, or combination of those, which provide general information regarding the hazards of the chemicals. Workplace labels ensure proper identification of all hazardous products, and therefore aid in protecting school employees who may come in contact with containers of hazardous chemicals. All instructional and non-instructional departments should be supplied with standard procedures and materials to properly implement this labeling system.
Sample Shipped Container Label:

Toxiflam (Contains: XYZ)
Danger! Toxic If Swallowed, Flammable Liquid and Vapor

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

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth. In case of fire, use water fog, dry chemical, CO₂, or “alcohol” foam.

See Material Safety Data Sheet for further details regarding safe use of this product
MyCompany, MyStreet, MyTown, NJ 00000, Tel: 444 999 9999

Sample Workplace Label:

My Product

Warning!

Causes Skin and Eye irritation

Suspected of causing cancer by inhalation

Contains: XYZ
ROUTES OF ENTRY

A chemical cannot be harmful to the body unless it enters the body. The simplest way to prevent poisonings or reactions is to keep it away from yourself.

*Eye or Skin Contact:* Some chemicals can cause damage directly to the skin or eyes. Acids or corrosives are an example. Other materials may penetrate the skin and attack other parts of the body. Petroleum distillates are an example.

*Inhalation:* All airborne materials; vapors, dusts, fumes, gases, mists are easily inhaled. Inhalation is a very common route of entry for all people.

*Ingestion:* liquids and solids can be ingested. Children who put things in their mouths usually come to mind. However, adults can also ingest materials by not washing their hands before they eat, or by smoking while they work.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal Protective Equipment or PPE may be required for using many of the products in your building. In general, your employer is required to provide proper PPE at no expense to you, but there are exceptions. Steel toe boots may be an employee expense depending on your facility’s uniform agreement. PPE can include:

**Gloves:** Gloves generally protect the hands. When working with chemicals it is important to select the correct gloves for the job. Latex gloves are vulnerable to penetration by petroleum based solvents, but work well for first aid. Nitrile gloves resist many chemicals well, but may be difficult to perform detailed work. Thick cloth or leather gloves may be appropriate for handling hot objects, but may allow penetration by chemicals.
PERSONAL PROTECTIVE EQUIPMENT (PPE)

(CONTINUED)

**Glasses and Goggles:** Can prevent eye injury if proper protection is used. Safety glasses are meant to withstand impact from flying objects. An approved set will have an ANSI (American National Standards Institute) Z 87 stamped on it. Splash goggles which are approved safety glasses will also have the Z 87 stamp, and are also designed to inhibit liquids from penetrating through a vent, or around its edge.

**Face Shields:** Face Shields are designed to protect the face from splashes of chemicals. If one is used, splash goggles must be worn underneath the shield, as the primary protection.

**Respirators:** Respirators protect the user from airborne contaminants. Although they may appear simple, they are actually a complex piece of equipment. In order to use a respirator at work, the employee must be trained in selecting correct filters and operating the respirator. The person must also be fit tested for the respirator, and have a medical exam conducted annually to ensure that he or she is medically able to use a respirator.

**OTHER PPE**

**Hearing Protection** comes in two forms, inserts or ear muffs. Inserts are not desirable for people with ear infections. **Hard Hats** are required in areas where objects may fall on employees. **Steel Toe Boots** may be required in areas where damage to the feet may occur. **Welding Helmets** are required for welding operations.
GENERAL CHEMICAL EMERGENCY PROCEDURES

- Get contaminated victims to a safety shower and/or eyewash (except with injuries involving alkali metals – use mineral oil instead).
- Remove victim’s contaminated clothing and flush exposed areas for 15 minutes under running water.
- Shut doors to the spill area.
- Call 911 (or emergency number) to report accident or pull the nearest fire alarm.
- Evacuate the area, if necessary.
- Call appropriate school personnel, if necessary.

Never worry about being overcautious in a hazardous situation. No harm is done by leaving a questionable area or calling for assistance. Details of the exact chemical reaction or relative hazard can be discussed at length later; in fact, such review is useful in preventing future problems in similar situations. Taking immediate action is the key to limiting potential exposure and injury.

GENERAL FIRST AID PROCEDURES

*Be First Aid trained ahead of time!*

**BLEEDING** – **USE UNIVERSAL PRECAUTIONS!** Apply direct pressure on the wound with a clean dressing. If bleeding continues and you do not suspect a fracture, elevate the wound above the victim’s heart and continue to apply direct pressure. If bleeding continues, apply pressure at a pressure point. Maintain body temperature.

**BREATHING PROBLEMS** – Move victim to fresh air if smoke or dangerous gases are present. Otherwise, do not move victim. Ask victim “Are you choking?” If choking, perform abdominal thrusts (e.g., Heimlich maneuver). If victim loses consciousness, call 911 emergency number. Never enter a room with suspected toxic gases present – call 911 instead.
UNCONSCIOUS VICTIM – Move victim to fresh air if smoke or dangerous gases exist. Begin rescue breathing. Never enter a room with suspected toxic gases present – call 911 (emergency number) instead.

CHEMICAL BURNS – Smother flames with a fire blanket or emergency shower. Call 911 (emergency number) or have someone else call 911. Have the victim remain under a safety shower or flush skin with any available water source for 15-30 minutes. Remove all contaminated clothing and jewelry. Cover burns with dry, loose dressings. Wash all clothing thoroughly before wearing it again. Chemical burns involving alkali metals should NOT be treated with water, but with mineral oil to clean the wounded skin.

CHEMICAL INGESTION – Call 911 (emergency number). Identify the chemical and follow the advice. Call the Poison Control Center. Do not give the victim any food or liquids without specific advice from a physician.

EYE INJURIES FROM CHEMICALS – Get the victim to a safety shower or eyewash immediately. Call 911 (emergency number). Flush eye for 15-30 minutes with both lids held open. Keep the injured eye lower than the uninjured eye. Keep eyelids open – hold fingers at top and bottom of the eyeball. Wrap a bandage loosely around both eyes. Eye injuries involving alkali metals should NOT be treated with water, but with mineral oil to clean the eyes.
UNIVERSAL PRECAUTIONS

Universal Precautions are hygiene procedures used to prevent blood or Other Potentially Infectious Material (OPIM) exposure. All tasks with a potential for blood exposure require the use of Universal Precautions to eliminate or minimize the possibility of exposure. Whenever possible, encourage individuals to tend to their own injury.

The school district analyzes job tasks for their potential for blood or OPIM exposure. The identified employees who are at occupational risk for exposure to blood or OPIM are included in the Exposure Control Plan and receive additional initial and annual training. These identified or “designated” employees have to perform tasks that might involve exposure to blood in the course of performing their job duties. This is different from an employee who may assist another staff member or student as a “Good Samaritan.” The Good Samaritan may choose to help someone with a bleeding injury even though it is not part of their job duties.

Whether as a designated employee at occupational risk or as a Good Samaritan, all employees should follow Universal Precautions whenever there is a reasonably anticipated risk of exposure. All school staff and students should take precautions against the transmission of disease by using proper techniques and good hygiene to prevent the spread of infection and to protect themselves. There should be no distinction between those having symptomatic or asymptomatic disease. Thorough hand washing is a basic and effective way to maintain good hygiene and infection control.

If blood or OPIM is present, all “hands-on” employees must observe Universal Precautions.

- Wear gloves
- Use disposable towels
- Put all contaminated items in a plastic bag
- Clean and disinfect contaminated areas
- Remove gloves carefully and correctly
- Wash hands thoroughly
Reporting Incidents of Exposure

All incidents of potential exposure to bloodborne pathogens must be reported to the health office and/or your supervisor. An occupational exposure occurs when someone else’s blood or body fluid gets through your skin or in your eyes, nose, or mouth. Confidential medical evaluation and counseling are available to any exposed employee. Post exposure evaluation by a Health Care Professional may include recommendation for post-exposure vaccination, testing and/or counseling.

Included in the Plan is the following information:

<table>
<thead>
<tr>
<th>school district’s EXPOSURE CONTROL PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ copy of the OSHA standard</td>
</tr>
<tr>
<td>➢ exposure determination</td>
</tr>
<tr>
<td>➢ post-exposure evaluation and follow-up</td>
</tr>
<tr>
<td>➢ Hepatitis B vaccination information</td>
</tr>
<tr>
<td>➢ methods of compliance</td>
</tr>
<tr>
<td>➢ employee training and information record keeping</td>
</tr>
</tbody>
</table>

Exposure determination analyzes job tasks for their potential for blood or OPIM exposure. Included in this is the identification of employees who are at occupational risk for exposure to blood or OPIM. At risk employees have to perform tasks that might involve exposure to blood in the course of performing their job duties. A school nurse’s duties clearly carry the inherent risk of exposure. This is different from an employee who may assist another staff member or student as a “Good Samaritan.” The Good Samaritan may choose to help someone with a bleeding injury even though it is not part of their job duties.

Whether at occupational risk or as Good Samaritans, all employees should follow Universal Precautions whenever there is a reasonably anticipated risk of exposure. All school staff and students should take precautions against the transmission of disease by using proper techniques and good hygiene to prevent the spread of infection and to protect themselves. There should be no distinction between those having symptomatic or asymptomatic disease. Thorough hand washing is a basic and effective way to maintain good hygiene and infection control.
Employee Record

Record of Right to Know/ Hazard Communication/ Universal Precautions
Information Received by the Employee

☐ I have received information on the OSHA Hazard Communication Standard and the New York State Right to Know Law.

☐ I have been informed of my rights and responsibilities as an employee under these regulations.

☐ I have been made aware of the availability of the Material Safety Data Sheets/ Safety Data Sheets, the school’s product/chemical inventory, the MDSD/SDS file and the personal protective equipment (gloves, etc.) available to minimize exposure to possible bloodborne pathogens.

☐ I know who to contact for more information on chemical safety, bloodborne pathogens, who to contact, and procedures to follow in case of an emergency.

☐ I have been given additional information on specific areas such as science laboratories, art classrooms, etc., where appropriate.

Employee Signature __________________________ Date __________

Department(s) ___________________________ District __________

Return to:
Useful Internet Sites

Poison Control Center: 1-800-222-1222

HEALTH/SAFETY/RISK MANAGEMENT WEBSITES

- Material Safety Data Sheets: http://www.msdsonline.com
- Capital Region BOCES: http://www.capregboces.org

Other Useful Internet Sites

U.S. Center for Disease Control and Prevention (CDC) – http://www.cdc.gov
U.S. Occupational Safety and Health Administration (OSHA) – http://www.osha.gov
U.S. Environmental Protection Agency (EPA) – http://www.epa.gov
New York State Education Department Facilities Planning – http://www.emsc.nysed.gov/facplan
New York State Emergency Management Office (SEMO) – http://www.semo.state.ny.us
New York State Department of Environmental Conservation (DEC or ENCON) – http://www.dec.ny.gov
New York State Department of Health (NYSDOH) – http://www.nyhealth.gov
New York State Department of Labor Public Employee Safety and Health (NYSDOL/PESH) – http://www.labor.state.ny.us
New York State Police (School and Community Outreach Programs) – http://www.troopers.ny.gov/Schools_and_Communities
Association of Educational Safety and Health Professionals – http://www.aohp.org
BOCES Health/Safety/Risk Management, (518) 464-5115, can assist with:

* Art and Science Classroom Safety
* Asbestos and AHERA
* Bloodborne Pathogens & Universal Precautions
* Bulk Storage Tanks
* Chemical Inventory Assistance
* Confined Spaces
* Emergency Planning & School Safety Plans (SAVE)
* EPA Safe Drinking Water Act/Water Quality
* Fire and Building Code
* Indoor Air Quality
* Lead Poisoning Prevention Awareness – OSHA/EPA/SED Regulations
* NYS Department of Health Courses in Asbestos for DOL Certification
* NYS Pollutant Discharge Elimination
* OSHA Compliance
* Pesticide Application & Neighbor Notification Regulations
* Playground Safety
* RESCUE (Annual Visual Inspections)
* Respirator Use/Medical Surveillance
* Right-To-Know and Hazard Communication
* Risk Management Services
* Safety Committees
* Transportation Safety
* Underground Injection Control
* Workplace Hazard Assessment

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