

## SAN DIEGO CITY SCHOOLS INFORMATION FOR CHEMICAL HYGIENE OFFICERS

### Duties and Responsibilities

The Chemical Hygiene Officer (CHO) has the Responsibility to:

- Ensure the communication of the Chemical Hygiene Program to teachers and students and assist in its implementation
- Consult with teachers and students for the implementation of the Chemical Hygiene Program
- Act as liaison with the District Safety Office regarding matters covered under the Chemical Hygiene Program
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### Personal Protective Equipment

Proper personal protective equipment is essential in protecting teachers from unwanted exposures to hazardous materials. A lab coat, safety glasses and gloves shall be used for all potentially hazardous laboratory activities.

### Safety Showers and Eye Washes

Make sure safety showers are readily accessible for use when a chemical spill contaminates large sections of clothing or skin. Be sure that eye wash stations are available within 100 feet of areas where chemicals that pose a severe threat to the eyes are used and/or stored.

### Chemical Labeling

All containers must be labeled. If possible, keep substances in the original container. At a minimum provide the following information on the container:

Identify the hazardous substance

Provide appropriate hazard warnings

### Chemical Hazard Classification and Safety Precautions

**Flammables and Combustibles:** Common examples of flammables and combustibles used in High School laboratories include Acetone, Alcohol  
Limit storage of flammables to the smallest amount needed.

#### Corrosives

Corrosives are materials that can cause damage to living tissue, metal, or wood.

Corrosives are divided into three categories: Alkalis, Acids, and others. Do not store acid and bases, or acids and flammables/combustibles together.

#### Compressed Gas Cylinders

Examples of common compressed gases:

Argon, Carbon Dioxide, Compressed Air, Helium, Nitrogen, Oxygen, and Hydrogen.

Cylinders must be secured, whether they are full or empty.

Before moving cylinders, close the cylinder valve, remove the regulator, and install valve protector cap.

### **Water Reactive Materials**

Water reactive chemicals form potentially explosive mixtures with water. Alkali Metals include Lithium, Sodium and Potassium. These alkali metals are usually stored under a layer of mineral oil to protect them from moisture in air.

### **Oxidizers**

Strong oxidizers can form explosive mixtures when mixed with combustible, organic or easily oxidizable materials.

### **Training**

Staff should be provided with initial science safety training to ensure that they are apprised of the hazards of chemicals present in their work area. Information and training may relate to hazardous substances to the extent appropriate. Refresher information and training should be conducted annually.

## **Inspections:**

**Fire extinguishers-** Should be inspected monthly, initial & date the attached inspection card. Extinguishers should be placed in the proper location, (in their cabinet or on their hook). There should be no obstructions and extinguishers should be easily visible & readily accessible with the operating instructions legible & facing out. Safety seals/tamper indicators should not be broken or missing. There should be no visible damage, corrosion, leakage, or clogged nozzles. The pressure gauge needle must be in the green zone. Lift the extinguisher to determine fullness.

**Emergency eye wash/showers-** Should be inspected monthly, initial & date the inspection card. The location should be visually obvious and easily accessible with no obstructions. All protective covers must be in place on eye wash stations with no debris/trash stuck into water orifices. The unit(s) must be activated monthly to flush lines and ensure proper operation, (a bucket or trash can may be used to catch the water).

**General house keeping-** Aisles should be clean and clear of obstructions. There shall be no combustibles hanging from ceilings or near sources of ignition such as burners and heaters. The fire blanket should be easily visible & readily accessible. There should be no leaking containers anywhere. Outlets with built-in ground fault circuit interrupters, (GFCI), should be installed in wet areas. Electrical panels must be kept clear, gas shut-off valve(s) must be clearly labeled and easily accessible. Work rooms/chemical storage areas should not be accessible to unsupervised students.

Compressed gas cylinders must be secured to a cart designed for this purpose or attached to a wall with chains. The valve must be removed and the cap on when not in use.