Pennsylvania
Worker and Community
RIGHT – TO – KNOW

Training Booklet

Revised September, 2007
The Pennsylvania Legislature enacted the Worker and Community Right-To-Know Act in October 1984. As a result of this legislation, all employees of the School District are to be informed of the regulations and the training required by the regulations. This booklet has been prepared to fulfill these requirements and will discuss the following:

An Overview of the Regulations
Training Requirements
Chemicals in the Workplace
Potential Health and Physical Hazards of the Chemicals
Review of the MSDS
Labeling Requirements
Accessibility and Release of Information
I. THE REGULATIONS AND THEIR HISTORY

The Pennsylvania Legislature passed the Worker and Community Right-To-Know Act in October 1984. It is patterned after the U.S. Department of Labor Occupational Health and Safety Administration (OSHA) Hazards Communication Standard (29 CFR 1910.1200). The Pennsylvania Act was written because the Department of Labor and Industry felt that the Federal Standard did not adequately protect the public and that a number of provisions had to be added. Among the additions is the expansion of the coverage of the law from manufacturers only to the entire business community. They also felt that the trade secret protection provisions in the Federal Standard were too liberal and that health and safety information was more important than the protection of these secrets. In order for the employees to be better informed, they also require that information on the employees’ rights and a list of chemicals in the workplace should be posted in a conspicuous place. Another important aspect is the extension of the information to the general public through the Department of Labor and Industry. Lastly, a major concern was raised regarding the labeling of pipelines and ports. After a number of court decisions, the final regulations implementing the Act were published on August 2, 1986. Since the court decisions ruled that the manufacturers were adequately covered under the Federal Standard, the Pennsylvania Right-To-Know Act deals mainly with the non-manufacturing community. On August 24, 1987, the Department of Labor published their extension of the Hazards Communication Standard to cover all industry under the jurisdiction of OSHA effective May 23, 1988. This leaves Pennsylvania Right-To-Know Act with jurisdiction over all public employees such as the municipalities, townships, and public school districts.

The major thrust of the act is to provide the workers and the community with access to the information available for the proper and safe use of chemical substances in the workplace. It is hoped that by this cooperative program, the sources of illnesses and injuries caused by hazardous substances can be reduced.

II. TRAINING REQUIREMENTS

All employees exposed to hazardous substances in their workplace must be trained at least annually. New employees must be trained within 120 days of hire. Training is also required when a different hazard is introduced into the workplace, upon reassignment and when new information becomes available.

In regards to different hazards, it must be pointed out that training is only required if a different hazard is introduced. Many chemicals have the same hazard and can be interchanged without requiring additional training. For example, solvents are flammable, such as ethyl alcohol commonly known as grain alcohol or butyl acetate (a lacquer thinner). These can be interchanged since neither has another hazard associated with it. But, if methanol (wood alcohol) is substituted, it is flammable, but also has the additional hazard of toxicity. Therefore, before introducing methanol into the workplace, training would be required.

Additional training is required upon reassignment of personnel. This training is only necessary if the reassigned position would have different and/or additional hazards.

With the concern regarding the potential cancer causing properties of chemicals and as new and better analytical techniques for identifying chemicals are being developed, training is also required when new information becomes available. It is the responsibility of the manufacturer to inform the purchaser of the product with any new information regarding the hazards of the substances. This information must then be passed on to the employee or the user of the substance.
III. HAZARDS OF CHEMICALS AND CHEMICAL SUBSTANCES

Before discussing the chemicals and chemical substances in your particular workplace, it would be helpful to discuss some of the common terms used to define hazards. The U.S. Department of Transportation categorizes hazardous materials into groups, which require identification of the transporting vehicle, if the quantity shipped is above a prescribed amount. These categories each have a distinguished placard and label, which many of us have seen on trucks on our highways and streets.

Probably the hazard most school district employees would encounter is the irritants. Irritants are substances which cause a discomfort, usually a mild condition such as red rash, itching, stinging or tearing of the eyes. This condition may be disabling such as a severe rash or blurred vision, but the effects of an irritant are generally not permanent. Removal from the source of irritation generally lessens the effect.

Another common hazard is toxicity. Toxic materials can cause illness, disablement, unconsciousness or even death. Corrosive materials are substances which eat away at a substance usually with a permanent effect. Flammable materials are substances that can be ignited easily when exposed to a spark while combustible materials require a sustained heat to ignite.

Hazardous substances can cause acute (immediate) effects or chronic (long term) effects if improperly handled. Immediate effects may be severe and usually occur rapidly, such as chemical burns from strong acids. Chronic effects come from long-term exposure such as those effects caused by smoking cigarettes.

In general, exposure to harmful substances occurs by one of three (3) routes. Direct contact with the substance while handling or as a result of a spill or splash, directly on the person, is a major route of entry. Inhalation of the substance in the form of a dust, fume, vapor, spray or mist can be either through the nose or mouth. Ingestion of the substance can occur directly or can be from the food, drink or utensils which have become contaminated by dusts or fumes.

A/ PRECAUTIONS

Some of the safety measures that can be taken in the proper handling of hazardous substances are the knowledge of the substance, the proper use of the substance, proper storage, the use of the proper personal protective equipment and labels.

B/ KNOWLEDGE OF THE SUBSTANCE

Chemists are often depicted as the mad scientists pouring colored liquids together and producing fuming, bubbling reactions. While it is true that many chemists do produce violent reactions, they normally have previously predicted the outcome of their experiments from their knowledge of the chemicals and their reactivity. A basic understanding of the possible reactions, which can take place, can help prepare for the potential hazardous reactions.

Workers who handle hazardous substances should take the time to read the information available to them. Labels are a primary source of information as are the Material Safety Data Sheets. Also, manufacturer literature can contain valuable information. It is advisable to follow the precautions supplied by the manufacturer.
Should there be a need for more information, a phone call or letter to the manufacturer can be helpful. Most consumer products, for example, will have a consumer information toll-free number printed on the label.

C/ USE OF CHEMICALS

Many chemicals are safe to use if they are used in the manner for which they were formulated. If one would read the labels on various consumer products, they would find warnings or precautionary statements on many of the labels. One such statement appears on a common toilet bowl cleaner. It warns one of the potential hazards of the fumes produced and the possible explosions if the cleaner is mixed with a chlorinated product such as laundry bleach. Other products are safe to use only at certain concentrations or dosages. Drain cleaners recommend that a certain time period elapse before reuse. This is to allow the drain to cool and fumes to dissipate before causing another reaction, which could lead to a potentially hazardous situation.

D/ PROPER STORAGE

Most materials which are used react with water or will change properties if exposed to extreme heat or cold. Labels on the products will carry such information if it is required. Do not store certain chemical families with other chemical families since violent reactions could occur if the materials are mixed. Storage information can be found in the Material Safety Data Sheets.

E/ PERSONAL PROTECTIVE EQUIPMENT

Whenever working with hazardous materials, it is important to check what personal protective equipment is recommended to be used. Among the items recommended are eye protection, gloves, boots or other special shoes, protective suits and respirators. Each particular job will have different protective requirements. A fire resistant suit will not protect from toxic vapors. Dust masks are not effective respirators for fumes. Consult the Material Safety Data Sheet for manufacturer’s recommendations. Whenever using personal protective equipment, always check its condition for rips or tears and check for proper fit.

F/ LOCATION: MATERIAL SAFETY DATA SHEETS

All employees are required to become knowledgeable about LCTI’s procedures for the location, routing, filing, and their responsibilities for implementing Right-to-Know information found on MSDS. Employees are required to review LCTI Procedure 400-12 that pertains to MSDS.

G/ MATERIAL SAFETY DATA SHEETS

The Material Safety Data Sheets are the main source of information of the hazards of the substances in the workplace. These sheets are available for your review and you should be aware of how to use the key information.

SECTION I – Manufacturers’ information and chemical identification.
SECTION II – Hazardous ingredients and the threshold limit value (TLV), which refers to the airborne concentration of a substance and represents conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. The higher the TLV, the less hazardous it is.

SECTION III – Physical Data including data such as the vapor density, specific gravity, solubility in water and appearance and color.

SECTION IV – Fire and Explosion Data for information on the probability of fire and explosion and the methods for control.

SECTION V – Health Hazards Data including health effects due to over exposure and what to do if contact with the chemical is made. For example, for acids, it would recommend flooding with water.

SECTION VI – Reactivity Data shows how stable the chemical is and points out conditions or materials to avoid. An example is the reaction of aluminum with caustic soda or lye, which reacts when wet to liberate hydrogen gas which can explode. This is the reaction that takes place when the commercial drain cleaner, Drano, is poured into clogged drain. The bubbling action produced by the liberation of hydrogen gas aids in cleaning the drain.

SECTION VII – Spill or leak procedure indicates what should be done when a spill occurs, how to clean them up and how to properly dispose of the spilled material.

SECTION VIII – Indicates special protective equipment such as the type of respirator, which should be used, and ventilation information.

SECTION IX – Lists any special precaution that should be taken such as storage information.

H/ LABELS

Labeling of containers is a very important aspect of chemical safety. Many liquids that are used are water white and without proper identification, it is difficult and dangerous to determine what the material is. Many solids are white crystalline or powdered solids that look like salt or sugar. To avoid a potentially harmful disaster, it is very important to label all containers properly. All containers must be labeled with the chemical or common name, the hazard of the product and the manufacturer’s name, address, and telephone number.

Labeling is important, but as referred to previously, reading the label is equally important. Many labels contain precautionary or warning messages, which are specific for the products. Examples of such warnings are found on toilet bowl cleaners, drain openers, windshield washer fluids, strong acids, and strong alkalines or bases.

I/ LABELING REQUIREMENTS

All containers of hazardous substances must be labeled. The following items are regulated by a different authority and must meet the specific requirements of that authority:
Pesticides
Food, drugs, and cosmetics
Distilled spirits
Hazardous waste

Also, containers that contain substances which are transferred from other labeled container by an employee for immediate use by the employee, do not have to be labeled.

Most substances received by a school district come properly labeled from the manufacturer. Therefore, unless a transfer of material is made, the original label on the container will generally meet the requirements of the regulation. When a transfer of the contents is made, certain information on the label must be transferred to the new container. The information on the label that is required to be transferred is the:

Common Name or Chemical Name
Hazard Warning
Name, address, and telephone number of the manufacturer

In addition to container labeling, pipelines must be labeled. The contents of the pipeline system shall be identified by a label at or near the port. Exclusions are:

Only effluents
Water discharges
Stack emissions
Discharge conduits
Fire sprinklers with water only
Water pipes
IV ACCESSIBILITY AND RELEASE OF INFORMATION

The workplace should have posted in the location where notices to employees are normally posted (for example, by time clock or employee bulletin board), a notice of the Worker and Community Right-To-Know. There are also posted lists of the hazardous substances in the workplace.

Every employee has the right to have readily available the information on the MSDS. This availability is made without requiring the supervisor's permission or intervention. If a MSDS is not available, the employee must request a MSDS from the manufacturer and the Department of Labor and Industry and allow the employee access to the MSDS as soon as it arrives.