



PENNRIDGE SCHOOL DISTRICT

HAZARDOUS MATERIALS MANAGEMENT PLAN

Prepared By: **Environmental Control Systems, Inc.**
Environmental Engineering & Management Consultants
950 Sussex Boulevard, Broomall, PA 19008
610-328-2880
www.ecsinfo.net

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Hazardous Materials Management Plan

PENNRIDGE SCHOOL DISTRICT HAZARDOUS MATERIALS MANAGEMENT PLAN

The PENNRIDGE School District (PSD) is committed to providing a safe working environment and believes employees have a right to know about health hazards associated with their work. So that employees can make knowledgeable decisions about any personal risks of employment, the Hazardous Materials Management Plan (HMMP) is established to include policies, procedures and responsibilities designed to develop awareness in employees of potentially infectious materials in the work place and to train employees on appropriate, safe working conditions. This plan is reviewed and updated annually and is available for all employees in the Board's Policy and Procedure manuals kept in every Principal's office and in the central office.

Overall, the responsibility for hazardous materials management rests at all levels of staff within the school system. However, the Superintendent and upper level administrators hold the ultimate responsibility to provide continuing support for school chemical hygiene. Physically, the PENNRIDGE School District's Health & Safety Committee (HSC) is the delegated administrator of the hazardous materials management and chemical hygiene program and is responsible to work with Principals/School Site Managers, designated Chemical Hygiene Officers and Teachers. The HSC is also responsible to implement the appropriate chemical hygiene policies and practices in order to monitor purchases, use and disposal of chemicals as well as has the authority to conduct all formal laboratory audits.

The HMMP was developed by the PENNRIDGE School District to outline protocols to safeguard custodial and maintenance workers. A Hazardous Materials Management Plan is written to: protect workers from health hazards associated with hazardous chemicals, keep exposures below specified limits and to have the HMMP readily available for review upon request. Controlling a hazard at its source is the best way to protect a worker

1. PURPOSE

The HMMP has been designed to accompany the guidance documents written cooperatively under The Environmental Protection Agency's (EPA's) School Chemical Cleanout Campaign (SC3) program in partnership with the Department of Education, Department of Labor and the Department of Environmental Protection. The information in this guidance document is intended to assist school personnel in creating a chemically safe school environment where chemicals are purchased wisely, stored safely, handled by trained staff and disposed of properly.

2. RESPONSIBILITIES:

Employees are expected to follow policies and procedures of their particular place of work. The exposure control officer must ensure the required employee training is completed and an annual program review and update is performed, as required by the regulations.

The Hazardous Materials Management Officer is Jeff Loeffler who has overall responsibility for the program in the Maintenance/Custodial Area.

A copy of the plan is available in the Engineering Department.

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3. ENGINEERING AND WORK PRACTICE CONTROLS

Engineering and work practice controls are utilized to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, personal protective equipment must also be used.

- Compliance Methods

- Safety Training in Hazardous Materials Management will be provided for all employees in the PENNRIDGE School District by an appropriately trained individual.
- Supervisors and workers examine and maintain engineering and work practice controls within the work center on a regular schedule.
- **Personal Protective Equipment**

Personal protective equipment in the form of, **disposable gloves**, is provided without cost to employees. Personal protective equipment is chosen based on anticipated exposure to blood or other potentially infectious materials. The protective equipment is considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of the time for which the protective equipment is used. All personal protective equipment is fluid resistant.

All personal protective equipment is disposed of by the employer at no cost to employees. All replacements are made by the employer at no cost to employees.

All garments that are penetrated by blood are removed immediately or as soon as feasible and placed in an **appropriate container**. All personal protective equipment is removed prior to leaving the work area and placed in an **appropriate container**.

Gloves are worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and mucous membranes. **Latex sensitive employees are provided with suitable alternative personal protective equipment.** (No employees, at the time of adoption of this plan, are Latex sensitive.)

Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

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Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves are discarded if they are cracked, peeling, torn, punctured, exhibit other signs of deterioration, or when their ability to function as a barrier is compromised.

- **Housekeeping**

- Spills of blood or other potentially infectious materials on floors are cleaned with a *Disinfectant Germicidal Detergent such as Buckeye Mint Quat*, a one-to-ten mixture of bleach and water, or another EPA-approved disinfectant.
- Blood and other spills of potentially infectious materials on other environmental surfaces are cleaned with *using a one step disinfectant germicidal detergent such as Buckeye Mint Quat or other approved cleaners.*

All contaminated work surfaces are decontaminated after completion of procedures, immediately or as soon as feasible after any spill of blood or other potentially infectious material, and at the end of the work shift. All containers used for contaminated materials are disposed of or inspected, cleaned, and decontaminated after use.

Protective coverings (e.g., plastic wrap, aluminum foil, etc.) used to cover equipment and environmental surfaces are removed and replaced as soon as feasible when they become contaminated.

Any broken glass that may be contaminated is not picked up directly with the hands.

Students must be instructed not to pick up broken glass on campus or in buildings.

- Chemical spills, blood and other potentially infectious material spills are cleaned up *using a one step disinfectant germicidal detergent such as Buckeye Mint Quat or other approved cleaners.*

Cleaning tools such as mops will be decontaminated after use on Blood and other potentially infectious materials.

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- **Regulated Waste Disposal**
Regulated Waste and or disposal will be brought to the attention of the Hazardous Materials Management Officer. The plan will be updated annually and this section will be revised as appropriate should the need arise.

- **Laundry Procedures (if applicable by Department)**
Although soiled linen may be contaminated with pathogenic microorganisms, the risk of disease transmission is negligible if it is handled, transported, and laundered in a manner that avoids transfer of microorganisms to personnel, and environments. As laundry is processed at various locations in the PSD, hygienic and common sense storage and processing of clean and soiled linen is recommended.

- Disposable gloves are worn during the handling of laundry. Underwear is bagged separately for each individual.

- Bloody laundry is washed and dried separately. EPA approved laundry products should be used.

4. USE OF BIOHAZARD LABELS

This section of the plan has been reviewed and has been determined not to be applicable at this time. The plan will be updated annually and this section will be revised as appropriate should the need arise.

- **HAZARDOUS, NON-HAZARDOUS & BIO HAZARD SPILL CLEAN UP**
 1. Keep others out of the area to prevent spreading spilled material. Post warning signs if needed.
 2. Contaminated clothing should be removed and placed in a biohazard bag for disinfecting/decontamination
 3. Wash hands and any exposed skin. Inform your supervisor of the spill and contact Facilities & Engineering for assistance, if necessary.
 4. Put on protective clothing (lab coat, gloves, face protection and shoe covers, depending on the amount of spilled material).
 5. Pick up any broken glass with forceps and dispose in a Sharps container.
 6. Cover the spill with paper towels and add disinfectant detergent.
 7. Allow 20 minutes contact time, discarding used paper towels in biohazard bag for autoclaving. Rewipe the spill area with disinfectant.
 8. Place all contaminated materials into a biohazard waste container, including gloves.
 9. Wash hands with soap and water.

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EMPLOYEE ACCIDENT REPORTING

- All accidents must be reported immediately to the supervisor.
- The supervisor and or the department representative will assist the employee in completing the Worker's Compensation report within 24 hours.
- The department should keep a copy of this report on file.
- The departmental Hazardous Materials Management Officer or supervisor, along with the employee, must complete an incident form for each incident, documenting the circumstances and controls in place and identifying any corrective action taken to prevent future occurrences. **Send a copy of the completed form to the Facilities and Engineering Department. Keep the original documentation with your department's records.**

5. WASTE DISPOSAL PROCEDURES

INTRODUCTION

The PENNRIDGE School District Hazardous, Non-Hazardous & Biohazardous Waste Management Plan has been prepared in accordance with EPA, OSHA and State of Pennsylvania Regulations.

This memo is intended to clarify segregation, packing and pickup of wastes, both biohazardous, non-hazardous and uncontaminated wastes.

DEFINING BIOHAZARDOUS WASTE

Biohazardous waste typically includes waste containing pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease. It includes all sharps from medical areas, patient care, and research, in addition to the waste types described below.

HAZARDOUS/BIOHAZARDOUS WASTE TYPES

1. Cultures, stocks of infectious agents and associated biologicals including but not limited to:
 - Specimens from medical, pathology and research laboratories;
 - Wastes generated from out dated or discontinued cleaning compounds
 - Disposable culture/petri dishes;
 - Devices used to transfer, inoculate, and mix cultures;
 - Wastes from the production of biologicals; and
 - Discarded live and attenuated vaccines.
2. Human blood, blood products, and body fluids.
3. All sharps (contaminated and uncontaminated) such as:
 - Needles and syringes;
 - Scalpels, razors, microtome blades;

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- Pasteur pipettes;
 - Slides and cover plates; and
 - Broken glass.
4. Carcasses, body parts and bedding from animals exposed to pathogens in research.

HANDLING HAZARDOUS/NON-HAZARDOUS WASTE

Waste must be segregated at the point of origin by the generator. *Do not use the biohazard box's red liner for autoclaving.* Waste must be placed either directly into the red-bag lined biowaste tub, *or* a red-bag lined white biowaste box. All hazardous chemicals shall be removed to the designated storage area. Flammable wastes shall be kept in a flammable cabinet or safe storage area.

All sharps must be placed in a red sharps container or a Winfield Sharps container.

Animal carcasses, body parts and bedding from animals exposed to pathogens should be disposed of in accordance with Animal Resources' procedures.

Human blood, blood products and body fluids greater than 500 ml must be *solidified* with a product such as Isolyzer and placed in a biowaste box or tub. Amounts less than 500ml can be disinfected with a bleach solution (1:10 final dilution).

UNCONTAMINATED WASTE

Uncontaminated sharps must also be placed in a red sharps container.

Plastic bottles and jars, e.g. media, bleach, or alcohol containers - place in regular trash, or recycle bin, if available.

Glass bottles or jars - empty, rinsed and unbroken - place in a **sturdy** cardboard box. If no box is available, place in a biowaste tub.

Broken laboratory glass - place in sharps containers.

PREPARING FOR PICKUP

Properly packaged and labeled waste will be removed from labs by Facilities and Engineering department custodial staff per schedule or as needed.

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Materials and Equipment Required for Custodians

- Antibacterial Soap
- Potable Water
- Paper Towels
- Latex and Non-Allergic Gloves
- Hazardous Material Bags (red) and labels
- Hazardous Material Sharp container (puncture and leak proof)
- Buckets and Mops
- Disinfectant germicidal detergents such as Butchers G-force H202 Multi Surface Cleaner or other approved cleaners.

ACCESSIBILITY OF EQUIPMENT AND MATERIALS

- Latex and /or non-allergenic gloves shall be available at all work stations in all buildings and outdoor facilities.
- Cleaning equipment and solutions shall be readily available to all work stations
- Hazardous material containers with a cover which is puncture proof and leak proof shall be kept in a central location (central office or nurse's station). Periodically, the container shall be disposed of and replaced in accordance with public health guidelines.

WASHABLE SURFACES

- Tables, desks – Wear gloves
 - Use disinfectant cleaners such as Butchers G-force H202 Multi Surface Cleaner or other approved cleaners.
 - Rinse with fresh water and repeat. Also to air dry. Dispose of gloves and wiping materials in the property container.
- Floors - Wear Gloves
 - Use disinfectant cleaners such as Butchers G-force H202 Multi Surface Cleaner or other approved cleaners.
 - Use a mop and two buckets – one for cleaning solution and one for rinse water
 - In bucket #1, dip, wring, mop up vomitus, blood etc. until all body fluids are cleaned up.
 - Dip mop into bucket #2, wring, re-mop (rinse) area. Continue until area is cleaned up using fresh solutions as necessary.
 - Soak mop in disinfectant solution after use.
 - Pour solutions down drain and flush thoroughly. Dispose of gloves in the proper manner.

ALWAYS REMEMBER TO WASH YOUR HANDS!!!!

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6. PENNSYLVANIA WORKER AND COMMUNITY RIGHT TO KNOW ACT of 1984

The Pennsylvania Worker and Community Right to Know Act of 1984 requires public sector employers (including school districts) to take various actions, including completing a hazardous substance survey, maintaining a file of material safety data sheets (MSDSs), labeling all containers of hazardous substances or hazardous mixtures, and providing information on the Act, employee rights and the inventory to their employees.

All personnel who directly handle or is exposed to chemicals in their workplace should be familiar with this manual. Under the right to know law, exposure can be defined as “a situation arising from a workplace operation where an employee may ingest, inhale, absorb through the skin or otherwise come into contact with a chemical”.

A. RIGHT TO KNOW LAW

The Pennsylvania Community Right to Know Act (Act 159 of 1984) was written to inform and educate employees of the hazardous substances stored in the workplace. Proper training assures that the employee who routinely uses, handles, or is exposed to chemicals in their work area is knowledgeable of these hazards and can assist the employer in creating a safe workplace for all. The law also affects those who have the potential of being around of or exposed to chemicals in the workplace. For such a workplace to exist, properly trained individuals become the first line of defense because the informed individual is able to identify potentially unsafe conditions before they occur and can react prudently when, as the first responder, they come upon a potentially dangerous situation.

The most important Hazardous Materials Management document a building can utilize is a department specific Material Safety Data Sheet (MSDS) Book. It contains the department specific product index, hazardous substance survey form, and product MSDS which are generally found in centrally determined locations including main office, and department head offices.

B. STANDARD OPERATING PROCEDURES DESIGNED FOR COMPREHENSIVE SAFETY

- Identify the locations of and which products in your workspace pose a risk including chemical storage closets and storage rooms.
- How to utilize these products safely under a controlled environment ;
- How to prevent accidents
- Know what precautions to take in the event of an accident.
- Identify possible and potential inventory issues

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MATERIAL SAFETY DATA SHEET (MSDS) BOOK

The MSDS Book is specific to the department, is centrally located, and contains the following information:

Alphabetized Product Inventory List (Index)
Alphabetized Hazardous Substance Survey Form (HSSF)

Purpose of this document is to provide assistance in planning to the local emergency response team with an inventory of hazardous substances present

Provide the public with information about hazardous substances stored in their workplace.

There is no expiration date. The MSDS Book is updated no later than April 1 each year for the previous calendar year of storage.

Alphabetized Material Safety Data Sheets (MSDS)
MSDS are prepared by the manufacturer or supplier for each product and should be readily available.

MSDS contain product name and includes but is not limited to: Product Name, Chemical Abstract Number, Chemical Ingredients, Exposure/Health Effects/First Aid, Emergency Procedures for Accidents, Personal Protective Equipment When Handling, and Disposal Methods.

MSDS sheets serve many important purposes, one of which explains in detail how to treat an individual should an emergency occur

CHEMICAL STORAGE

Safe chemical handling requires routine inspections of storage areas. Any concerns such as leaking bottles, or chemicals under going a chemical reaction should be brought to the supervisors' attention immediately. Proper storage and segregation of compatible products in addition to consideration for storage temperature, ignition control, and some precautions that should be taken:

- a. Ensure all containers are properly labeled.
- b. Ensure all closets, or storage cabinets are locked.
- c. Routinely inspect and inventory chemicals on hand. Look for and dispose of chemicals that are reacting, expired, or in excess of the supply.
- d. Always segregate and group products according to the MSDS requirements for storage. The following is a quick reference but always consult the MSDS for final word:

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Compressed gases – Flammable - Store in a cool, dry area, away from oxidizing gases. Securely strap or chain cylinders to a wall or bench.

Compressed gases – Oxidizing - Store in a cool, dry area, away from flammable gases and liquids. Securely strap or chain cylinders to a wall or bench.

Corrosives Acids - Store separately in acid storage cabinet.

Corrosives Bases - Store in separate corrosive storage cabinet.
Store solutions of inorganic hydroxides in labeled polyethylene containers.

Flammable Liquids - Store in flammable storage cabinet and away from sources of ignition. Store highly volatile flammable liquids in an explosion-proof refrigerator.

General Chemicals Non-reactive - Store on general laboratory benches or shelving preferably behind glass doors and below eye level.

Oxidizers - Store in a spill tray inside a chemical storage cabinet. Separate from flammable and combustible materials.

A. RESPONSIBILITIES OF SCHOOL PERSONNEL

The designated Hazardous Materials Management Officer is required to:

- Ensure students and staff know and follow the PENNRIDGE School District's HMMP
- Verify all chemical stockrooms/storerooms are adequate and well ventilated
- Assure the appropriate protective equipments is available and in working order
- Determine the required levels of protective apparel and equipment
- Conduct routine housekeeping inspections with an emergency equipment checklist
- Maintain documents/records of all routine inspections and condition of the emergency equipment
- Document in writing all identified facility or equipment problems to HSC and Principal promptly
- Provide access to reference material to include all Material Safety Data Sheets (MSDSs)
- Ensure that an annual inventory of laboratory chemicals is completed or updated
- Train teachers and students in the proper use of all assigned emergency safety devices and equipment to include: eyewashes, emergency showers, fire extinguishers, spill kits, first aide kits, emergency shutoffs, etc.
- Review the curriculum experiments for adequacy and appropriateness
- Train all Science Teachers prior to the introduction of new chemicals, new procedures, new experiments, substantially modified procedures and experiments, or unique new equipment(s); and
- Provide First Aid, CPR and "hands-on" fire extinguisher training to Science Teachers.

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7. SPILL KIT REQUIREMENTS

Every department or unit that handles hazardous chemicals shall have appropriate spill kits readily available to employees who handle those materials at anytime they are working with them. The spill kits shall have enough material to handle common spills. For example, neutralizing agents sufficient to cover 1 pint of an acid is not enough to take care of a 1 gallon spill, and therefore more would be required. A spill can be considered cleaned when the hazards are no longer present.

There are six types of spill kits. Following is a list of the types of kits and the minimum requirements for each kit.

- Flammables: Many sorbents used for organic liquids only absorb the liquid and do not keep the vapors down. Therefore, the requirements for flammable spill kits include a sorbent that will not only contain the liquid, but also hold the vapors; a sealed container for the residue; and non-sparking tools.
- Radioactive: The requirements for a radioactive spill kit include a sorbent material to contain and remove radioactive liquids, soap and sponges to clean the area. Choose the sorbent material based on the chemical hazard of the spilled material. A survey meter is necessary to check for contamination.
- Mercury: The requirements for a mercury spill kit include a spatula, scoop or suction device; treated sponges or wipes; decontaminating material; and jars to place contaminated material in.
- Acids: The requirements for an acid spill kit include a neutralizing material (not just a sorbent); indicators that neutralization is complete; and sealed containers for any residue.
- Bases: Similar to the acid spill kit, the requirements for a base spill kit include a neutralizing material (not just a sorbent); indicators that neutralization is complete; and sealed containers for any residue.
- Bio-hazardous material: The requirements for a bio-hazardous spill kit include a disinfectant (1:10 dilution of household bleach), an auto-clavable squeegee, auto-clavable dustpan, forceps, and germicidal soap.

Other materials might require special spill kits; e.g. hydrofluoric acid. Proper PPE should be included in each kit. Refer to the MSDS, Chemical Safety Guidelines, the Radiation Safety Manual, or the Bio-hazardous Materials Spill Clean-up Policy for more information on PPE.

Spill kits are available commercially, or may be assembled by the departments.

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APPENDIX A - EXPOSURE INCIDENT FORM

In the event of an exposure incident, two forms must be completed: (1) *the Employer's First Report of Injury* form for worker's compensation, and (2) the information on this form. The information provided below is intended to assist in evaluating the control methods used and to prevent future employee exposures.

Name of Person _____ Department _____

Incident Date _____ Time _____

Incident: Mark in each column, as appropriate

Incident:

Injury type:

Body Part Injured:

Cut:

Abrasion

Finger

Exposure:

Laceration

Hand

Body Fluids

Puncture

Arm

Infectious Material

Mucous Membrane

Eye

Other _____

Other _____

Description of Incident:

Protective equipment used:

Gloves

Protective Sleeves

Other

Goggles

Lab Coat

Face Mask/shield

Gown

Seen by:

No Medical Treatment sought

Emergency Treatment Center

What changes need to be made to prevent reoccurrence?

Report prepared by: _____

Position _____