HAZARD COMMUNICATION

1.0 PURPOSE AND INTRODUCTION

Pitt County Schools has developed a Hazard Communication Program to ensure that the hazards of all chemical substances used or stored are evaluated and information concerning hazards is transmitted to all affected employees. Pitt County Schools has established procedures for compliance with the North Carolina Occupation Safety and Health Administration (OSHA) hazard communication regulations. In addition, this procedure ensures that emergency responders have all necessary information to respond to chemical emergencies.

2.0 CHEMICAL APPROVAL

2.1 Chemicals obtained by Facility Services and distributed to the schools are tested for effectiveness and approved for use.

2.2 (Facility Services) – An SDS shall accompany all new chemicals prior to purchase for approval by the Assistant Director of Facility Services.

3.0 SAFETY DATA SHEETS (SDS)

3.1 An SDS must be obtained for all chemicals obtained by the schools. SDS's contain a listing of the chemical hazards as determined by the manufacturer and are an important part of hazard determination. Note – SDS's must be in English.

3.2 Facility Services maintains a chemical inventory of all chemicals supplied by and/or used by Facility Services. The chemical inventory is evaluated and updated annually.

3.3 All Custodial MSDS's are found on Pitt County Schools website or by contacting Facility Services.

3.4 Each school or site shall maintain current SDS's for every chemical or hazardous material located within their respective site. This excludes custodial MSDS's, which can be found on Pitt County Schools website. NOTE – The MSDS's shall be kept in a labeled notebook and placed in a location where it will be accessible to employees at any time.

3.5 Any employee obtaining and managing contract labor will ensure SDS's are obtained for any chemicals or hazardous materials that will be used in the performance of the contract.

3.6 If an injury results from a chemical or material exposure, the Principal/Site Administrator or first responder is responsible for determining the chemical or material and making available an SDS for emergency responders and medical professionals.

3.7 SDS's must be retained on file for 30 years after the chemical is no longer used.

3.8 Chemicals or hazardous materials shall only be used for their recommended purpose.

4.0 CONTAINER LABELING

4.1 It is the responsibility of each employee to ensure that all chemical products used are properly labeled.

4.2 Labels must contain the name of the material, contact information for the manufacturer, precautionary statements, and all hazard warnings appropriate for employee safety. NOTE – Labels must be in English.

4.3 Labels should be preprinted for each container, not hand written.

4.4 Chemicals that are removed from original containers and placed in secondary containers must be labeled with the chemical's name and hazard warning.

NOTE – Chemicals transferred into secondary containers for immediate use (ex. lab beakers) shall be exempt provided the container is under the control of the same employee at all times.

4.5 Existing labels on chemical containers shall not be removed or defaced and must remain readable.

4.6 Mechanical pipes containing hazardous chemicals must be labeled with a legible label that can be seen from floor level.

4.7 Asbestos insulated pipes shall be labeled with an asbestos materials warning label.

4.8 All chemical and material containers must be labeled by the distributor with the following new pictograms and hazards:

Health Hazard	Flame	Exclamation Mark
		
▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity	▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides	▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder	**Corrosion**	**Exploding Bomb**
		
▪ Gases Under Pressure	▪ Skin Corrosion/Burns ▪ Eye Damage ▪ Corrosive to Metals	▪ Explosives ▪ Self-Reactives ▪ Organic Peroxides
Flame Over Circle	**Environment** (Non-Mandatory)	**Skull and Crossbones**
		
▪ Oxidizers	▪ Aquatic Toxicity	▪ Acute Toxicity (fatal or toxic)

5.0 SIGNS

5.1 Flammable material signs will be posted in areas where flammable materials are stored and/or used. This includes areas such as the paint storage room and fueling stations.

5.2 All areas storing hazardous chemicals shall be marked with an NFPA sign.

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE will be used when all engineering controls and administrative controls have been evaluated and still do not fully protect employees. PPE will be determined by the recommendations of the SDS and the level of potential exposure.

7.0 HAZARDOUS CHEMICALS AND MATERIALS LOCATIONS

7.1 The main areas where hazardous chemicals and materials are used and/or stored include, but are not limited to, the following areas:

Art Classrooms
Automotive Classrooms
Boiler Rooms
Central Office Print Shop
Carpentry Classrooms
Custodial Storage Rooms
Facility Services' Carpentry Shop
Facility Services' Electrical/HVAC Facility
Facility Services' Warehouse
Photography and Graphic Arts Classrooms
Science Laboratories
Transportation's Facility

7.2 All hazardous chemicals and materials are to be kept out of reach of children and/or locked in storage when not in use. This includes, but is not limited to, the following chemicals periodically discovered in classrooms:

Adhesive Removers
Alcohol
ALL CLEANING CHEMICALS
All Purpose Cleaners
Bleach
Glass Cleaner
Medications
Nail Polish Remover
Paint, Including Spray Paint
Rubber Cement
WD 40

7.3 It is recommended that employees not bring cleaning chemicals from home for use at school.

7.4 Teachers using cleaning chemicals borrowed from custodians should return them when finished. Cleaning chemicals should not be stored in classrooms. Cleaning chemicals should be stored and kept locked in custodial storage rooms only.

7.5 Custodians are to only use cleaning chemicals supplied by Facility Services. Cleaning chemicals should be stored and kept locked in custodial storage rooms at all times.

8.0 CHEMICAL HYGIENE AND SCIENCE SAFETY

The Chemical Hygiene Program is intended to establish appropriate procedures and protective measures for Pitt County Schools teachers and students in all science and laboratory classes.

The Chemical Hygiene Plan for grades 6-12 can be seen on Pitt County Schools website or by contacting Facility Services.

The Science Safety Program for grades K-5 can be seen on Pitt County Schools website or by contacting Facility Services.

9.0 CUSTODIAL SAFETY

The Custodial Safety Program is intended to establish appropriate procedures and protective measures for Pitt County Schools custodians.

The Custodial Safety Program can be seen on Pitt County Schools website or by contacting Facility Services.

10.0 DEFINITIONS

Acute Health Effect – Rapidly occurring health effect

Asphyxiant – A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Chronic Health Effect – Health effect from long-term exposure

Compressed Gas – A pressurized gas or mixture of gasses

Container – Any bag, barrel, bottle, box, can, cylinder, drum, storage tank, or the like that contains a chemical

Explosive – A chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

Exposure – An employee is subjected to a chemical causing physical/health hazard at work.

Flammable – Aerosol, gas, liquid, or solid causing a fire due to its ignitability.

Flashpoint – The minimum temperature at which a liquid gives off enough vapor to ignite.

Hazardous Chemical – Any chemical that is classified as a physical hazard or a health hazard, a simple axphyxiant, combustible dust, pyrophoric gas, or a hazard not otherwise classified.

Hazard Warning – Words, pictures, and/or symbols on a product showing a physical or health hazard.

Health Hazard – A chemical that 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.

Identity – A chemical name or common name for a material.

IDLH – Immediately Dangerous to Life or Health. A very hazardous atmosphere that can cause serious injury or death.

Immediate Use – Used and remaining in the control of only by one person during the same work shift.

Label – An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

LD_{50} – The dose required to kill 50% of the subjects in a specified time.

Mixture – A non-reactive combination of chemicals.

Oxidizer – A chemical other than a blasting agent or explosive, that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

PEL – Permissible Exposure Limit. The quantity of a hazardous chemical or material to which a worker can be exposed to 8 hours a day or 40 hours per week without experiencing any ill effects.

Physical hazard – 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.

Pyrophoric – A chemical that ignites spontaneously in air at less than 130° F.

Reactive – A chemical which as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

Route of Entry – Paths by which a chemical can enter the body. (Ex. inhalation, ingestion, absorption)

Safety Data Sheet (SDS) – A document which describes pertinent information related to the use of a chemical product, including its physical and health hazards, the permissible exposure level, precautions for safe handling, spill cleanup, emergency and first aid procedures, personal protective equipment needs, and the name and telephone number of who can be contacted to obtain emergency procedures or other related information.

Sensitizer – A material that can cause an allergic reaction or the skin or respiratory system. Repeated exposures to a sensitizer can cause increasingly more serious allergic responses.

Signal word – A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

Water Reactive – A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

11.0 REFERENCE DOCUMENTS

American Conferences of Governmental Industrial Hygienists (ACGIH). **Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices.** Cincinnati, OH: ACGIH.

National Institute for Occupational Safety and Health (NIOSH). **NIOSH Pocket Guide to Chemical Hazards.** Cincinnati, OH: NIOSH.

North Carolina Occupational Safety and Health Administration. **Occupational Safety and Health Standards for General Industry:** *1910.1200, Hazardous Communication.* Raleigh, NC: N.C. Department of Labor.