North Carolina

LEA/School Employee Safety & Health Loss Prevention Handbook

DISCLAIMER NOTE: This document has been modified from the original "North Carolina State Employee Safety & Health Handbook" by the NC Department of Public Instruction, NC Public Schools Insurance Fund, for use by NC LEA's & Schools as a Model Loss Prevention Program. This document is not inclusive for all situations or codes/regulations. It may be used in its entirety or modified for local use. It is recommended that LEA's/Schools using this model, have their Local School Board of Education and Attorney review for adherence and inclusion of all Federal, State & Local Statutes, Codes & Ordinances.

February 2015

Table of Contents

Governor's Message	1
Purpose	2
Hazard Recognition Program	2
Responsibilities	3
Employee Responsibilities	3
Supervisor/Management	4
Safety and Health Leader	5
LEA or School Responsibilities	5
General Safety and Health Programs	6
Asbestos	6
Biological Hazards	7
Blood borne Pathogens	8
Confined Space	8
Emergency Response Plan	9
Electrical Safety	10
Ground Fault Circuit Interrupter (GCFI)	11
Temporary Wiring and Lighting	12
Ergonomics	12
Falls Prevention	14
Fire Prevention	15
First Aid	17
General Housekeeping/Sanitation	17
Hazard Communication Program	18
Responsibilities	19
Definition of Hazardous Chemicals	19
Labels and Other Forms of Warning	21
Chemical Inventory	22
Safety Data Sheets/Material Safety Data Sheets	22
Information and Training	23
Contractors	24
Health Hazards	24
Laboratory Safety	25
Basics	25
Lifting	26
Lockout/Tag out Control of Hazardous Energy	27
Machine Guarding	28

Medical Surveillance 29
Motor Vehicles 29
Driver’s License Requirements 29
Commercial Driver’s License 29
Vehicle Operations 30
Vehicle Parking 30
Safety Belts 31
Responding To Emergencies 31
Accidents 31
Noise 31
Off The Job Safety 31
Office Safety 32
Personal Protective Equipment 34
Portable Ladders and Scaffolds 36
Ladders 36
Scaffolds 37
Powered Industrial Trucks/Material 39
Handling Equipment 39
Tools - Hand and Power 40
Powder Actuated Tools 41
Trenching and Excavations 42
Signs and Barricades 43
Workplace Injury and Illness 44
Workplace Violence 44
Acknowledgement 47

STATE OF NORTH CAROLINA
OFFICE OF THE GOVERNOR

PAT MCCRORY
GOVERNOR

Dear Fellow State Employee:

A safe workplace is central to keeping North Carolina state government operating efficiently, but most of all, practicing workplace safety is simply the right thing to do.

We are committed to providing a safe and healthy work environment for all state employees, whether in an office, on the road or out in the field. However, safety demands the involvement of every employee each working day.

One of the first steps in developing good safety practices is to become familiar with this handbook. Another is to recognize safety is a shared responsibility in order to keep our fellow co-workers free from potential injury. A safe workplace also boosts employee morale because it allows us to concentrate on doing our job to the best of our ability without worry of dangers that may lurk around the corner. A safe work environment also tends to have fewer staff absences or turnover and that experience leads to increased work quality.

Safety is also an obligation we owe to our fellow citizens. Cutting down on costly workplace accidents reduces taxpayer expenditures with regard to lost time, worker's compensation claims, and in some cases legal costs.

Please join me in making workplace safety a daily person priority so that we will always be at our best to serve the people in this great state of North Carolina

Sincerely,

Pat McCrory

20301 Mail Service Center • Raleigh, NC 27699-0301 • Telephone: 919-733-5811
WWW.GOVERNOR.STATE.NC.US

Purpose

This handbook is designed to give LEA employees a firm understanding of the LEA's concern for protecting its employees from job related injuries or illnesses. The handbook has been developed to provide employees with answers to general questions regarding safety in the workplace. This booklet affirms that most hazards are created by personnel and thus personnel are responsible for following procedures and being mindful of their surroundings to prevent hazards from developing.

Each new employee should attend New Employee Orientation within thirty days of hire. During this orientation you will be given facility specific information regarding how to respond during various emergencies and your supervisor or HR Liaison will discuss site-specific safety policies and programs for your department. Your supervisor must inform you of safety procedures and required training you will need to do your job.

Additionally, you should keep this handbook at your workplace for ready or immediate access, as you would any important job related personal property. If you are confronted with a situation not covered in this book, consult your supervisor before going ahead.

The following pages contain only some of the highlights of the Safety and Health Regulations for general industry and construction under the North Carolina Occupational Safety and Health Act (NCOSHA) and other regulatory groups. It is not intended as a complete manual on safety and health, but should be used as a guide to the prevention of the more common hazards that might develop in the workplace. For specific standards applicable to your LEA or School, contact your Safety and Health Leader.

Hazard Hints: You will find hints throughout this booklet that will help you prevent personal injury to yourself or others. This handbook sets the expectation that we are our co-workers keeper and when a hazard, i.e. liquid on the floor is observed you will make all efforts to clean-up or barricade and label until correct cleaning supplies/personnel are found.

Hazard Recognition Program

To prevent injuries a hazard recognition program has been developed to train workers on how to identify, how to correct and how to report unsafe behaviors and unsafe conditions. Hazards can be reported on-line at (Insert your Link Here) and copies of the form can be obtained from your Safety Leader or printed directly by going to the (Insert your Link Here).

Employees are empowered to fix the unsafe condition immediately, if it is under their span of control. Supervisors will involve employees in identifying solutions to the unsafe act or condition therefore creating a culture of caring.

Safety Committees will be involved in reviewing the hazard reports, ensuring that hazards are communicated across the LEA to prevent injuries from occurring in other locations.

The hazard recognition program is established to ensure open communication between all levels of employment to foster a safe and healthful workplace. There shall be neither reprisals nor sanctions taken against any employee for bringing management's attention to a safety and health problem.

Hazard Hint: Over 90% of all injuries are caused from unsafe acts. Check your surroundings before entering look for hazards, unsafe conditions and last but not least ask your supervisor if you don't know how to do the job safely.

Notify your supervisor and safety committee representative of any known hazards immediately and complete the hazard report.

Contact your LEA/School Safety and Health Leader and your Human Resource (HR) Director if you feel the need to process the complaint further. After going through the chain of command and the issue is not resolved in a reasonable time frame, don't hesitate to call the Safety Hot-Line at (Insert your number here).

Responsibilities

Employee Responsibilities

All injuries, including minor first aid treatment, occurring on the job and any illness associated with the job shall be reported promptly and in writing to your supervisor. Questions concerning medical treatment of these injuries/illnesses should also be addressed to the supervisor and your Worker's Compensation Administrator.

Hazard Hint: Report injuries, near hits, hazardous conditions, burning odors, fires, damage to property, LEA vehicle accidents, hazardous material spills and unsafe behaviors or violations of procedures to your supervisor immediately.

The protection of fellow employees and of the public on LEA/School property is a shared responsibility of every employee.

Properly dispose of all hazardous materials in an acceptable and lawful manner. Your supervisor and/or your Safety and Health Leader can advise you of the required disposal method and practice.

Working while impaired by alcohol or drugs is specifically forbidden. Use of prescription drugs, which may affect your alertness or work abilities, must be reported to your supervisor prior to beginning work.

Hazard Hint: Prescription, over-the-counter medications, drug and alcohol abuse, and lack of sleep can affect your concentration and alertness and may result in injury. Practice healthy lifestyle choices to minimize your risk for injury and prolong your life.

Failure to comply with or enforce Safety and Health Rules and Regulations may result in disciplinary action up to and including dismissal. Violation of work rules is a job performance issue and shall be dealt with through job performance disciplinary process.

Each employee is to place safety and health requirements as first importance in the performance of their work duties for the LEA/School by following safety rules and procedures.

Employees should make recommendations to improve the safety and health in the workplace.

Employees shall wear, clean, maintain and use prescribed protective equipment.

Refrain from the operation of any equipment without both proper instructions and authorization.

Only use properly guarded equipment and not remove safety devices.

Good conduct is expected- “horseplay” will not be tolerated.

Supervisor/Manager Responsibilities

Recognize the most valuable asset in the LEA/Schools is their employees and therefore protecting employee safety and health is the greatest value of the LEA/Schools.

Remind employees to report hazards and ensuring that safe working conditions are present for employees.

Investigate reported hazards and document results of hazard review and inform management, Safety Leaders and safety committee representative.

Investigate near hits, property damage, incidents, and injuries as soon as possible, first determining whether a hazard is still present that could injure others. Eliminating or guarding against the hazard is a first priority after providing medical attention to the employee (if injured).

Complete a final or preliminary investigation and root cause analysis of the reported incident depending on the complexity of the incident.

Send the completed investigation report to the employee, the supervisors’ manager, the manager of the work area the incident occurred in (if area was under another manager’s area of control), worker’s compensation administrator and the Safety and Health Leader.

Corrective actions are to be identified and interim controls put in place for hazardous work environments under their control.

Each supervisor is also responsible to know and understand safety procedures and ensure that their employee's receive proper safety and health training.

Supervisors who have employees who are at increased risk due to the nature of work tasks will start off each day/shift with a short safety and health debriefing to review hazards associated with daily assignments, discuss injuries, or general safety topics.

Lead or participate in hazard assessments and implement required engineering controls, administrative controls and provide required personal protective equipment to employees.

Supervisors shall ensure that notification to the LEA's designated person occurs when regulatory (i.e., OSHA, EPA, and DENR) inspections occur at their LEA sites.

Safety and Health Leader

The Safety and Health Leader for each LEA is responsible for ensuring that the Workplace Requirements Program for Safety and Health and OSHA regulations are created and implemented with associated training classes.

Additional responsibilities are to include development of a risk assessment based methodology to be used in correcting workplace hazards on a priority basis throughout the LEA, development of an LEA safety and health documentation system for review of effectiveness, and establishment of long-range safety and health performance goals.

A report should be submitted annually to the LEA head indicating achievements, identifying major problem areas, annual goals and objectives, long-range plans, and funding needs.

LEA or School Responsibilities

The LEA or School shall develop and maintain an effective occupational safety and health program, including life safety and property protection.

No LEA or School shall knowingly require an employee to work in conditions that are hazardous without proper training and personal protective equipment.

Frequent and regular inspections of the workplace, materials and equipment shall be made by trained persons designated by each LEA or School.

Unsafe tools, materials or equipment shall be tagged, locked or removed from the workplace to prevent their use.

The LEA or School shall instruct each employee how to recognize and avoid unsafe conditions, unsafe work practices and the regulations and/or standards applicable to their work environment to control or eliminate any hazards.

The LEA or School shall provide medical services required involving on-the-job injuries or illnesses. The LEA or School is responsible for compensation to the employee for wages lost from work and/or any disability rating as a result of the on-the-job injury/illness.

All employees, escorted visitors and contractors shall be informed of hazards before entering a designated hazardous, caution, or restricted area; shall use required personal protective equipment; and shall adhere to safety and health procedures immediately upon access to the area.

The LEA or School shall provide appropriate personal protective equipment (PPE), conduct a hazard assessment, develop engineering controls and/or provide training in the use of PPE whenever there is exposure to hazardous conditions.

The LEA or School will designate safety and health committees as required, assuring equal representation in the composition of the committees between management and employees.

General Safety and Health Programs

Asbestos

An employee shall not remove or disturb asbestos, or material suspected of containing asbestos. Asbestos may be contained in materials such as:

- Adhesives and mastics
- ceiling areas
- duct work
- flooring- floor tiles
- insulation
- lab fume hoods
- piping
- vented enclosures

If there is any damage to materials or items suspected of containing asbestos, the Safety and Health Leader should be notified immediately.

Employees shall be notified of procedures related to asbestos are relevant for their facility i.e., do not hang pictures on the wall.

Hazard Hint: Asbestos can cause malignant lung cancer through prolonged inhalation of fibers. Intact and undisturbed asbestos containing materials (ACM) do not pose a health risk to building occupants. When ACM is properly managed, release of asbestos fibers into the air is minimized, and the risk of asbestos related health problems is negligible.

Biological Hazards

Biohazards are biological agents or substances present in or arising from the work environment which present or may present a hazard to the health or well-being of the worker or the community.

Biological agents and substances include, but are not limited to infectious and parasitic agents, toxins derived from organisms non-infectious microorganisms such as some mold, fungi and , or other plant or animal products that cause diseases.

Generally, biohazards are either:

- Infectious microorganisms
- Toxic biological substances
- Allergens or
- Any combination of these.

Biological agents can be found in numerous settings, but are primarily found in training, clinical, and laboratory settings or the result of infectious agents brought into the areas as a contaminant.

Employees are to be trained on what biological hazards may be encountered and which control measures and work practices are to be used in order to have a safe work place. In addition, employees
should be familiar with and refer to other documents such as the Exposure Control Plan, a Laboratory Safety Manual, or the Biosafety Control Plan that identifies the hazards as well as specific practices and procedures designed to minimize or eliminate risk.

Blood Borne Pathogens

Employees who have occupational exposure to human blood, body fluid, pathogens, or body parts are required to receive training in work practices, methods of exposure and universal precautions, initially and annually thereafter. Employees exposed to blood or other body fluids should contact their supervisor and LEA or School Safety and Health Leader immediately and request information on the LEA or School exposure control plan and the employer provided hepatitis or other applicable vaccinations. The most important element is strict adherence to the specified practices and procedures and use of universal precautions when interacting with all human blood or body fluids. These include a system of administrative controls, personal protective equipment (PPE).
Immediate washing of hands and contaminated areas of the body shall be implemented should an exposure to bodily fluids occur.

Hazard Hint: Washing hands with warm soapy water for thirty seconds prevents colds and other illnesses. Many LEA facilities provide hand sanitizers to help prevent spreading illnesses.

Confined Space

OSHA defines a confined space as a space that is large enough for an employee to enter or break the plane of entry, has restricted means of entry or exit, has unfavorable natural ventilation and is not designed for continuous employee occupancy.

Examples of confined spaces include, but are not limited to:

- digester
- manholes
- sewers
- silos
- tanks
- tunnels
- trenches
- vaults

Agencies should identify all confined spaces and maintain a confined space entry policy and procedure.

Do not enter a confined space or break the plane of entry with any part of your body if you are not trained.

Entry into confined space can be extremely dangerous. Possible hazards can include:

- Oxygen deficiency
- Fire, explosion hazards
- Exposure to dangerous vapors and toxic gases
- Physical hazards

OSHA estimates that almost sixty six percent (66%) of the deaths in confined spaces each year result from people attempting rescue.

All personnel involved or having responsibility for entry into confined spaces must be thoroughly familiar with permit entry and rescue procedures. Detailed LEA or School procedures are issued in a separate document. Regulations governing entry into confined spaces are specified by OSHA 29CFR, 1910.146.

Hazard Hint: A confined space can lack oxygen or have dangerous gases. Only trained personnel can enter a confined space using appropriate procedures and personal protective equipment. Gases are often heavier than air so, if you see a person lying down in a manhole or below street level, do not attempt to rescue, call 911.

Emergency Response Plan

Obtain and learn your agencies specific emergency response plan for your workplace for fire, chemical release, severe weather, bomb threat, etc. The following general rules and actions should be learned before an emergency and followed in the event of an emergency.

Before an Emergency:

• Obtain your LEA's Emergency Action Plan from your supervisor.

• Learn how to contact emergency services.

• Locate local fire alarms or other emergency alarm systems and learn how to operate them.

• Learn the location of all exits, (exit stairs) from your work area, and determine a primary and alternate exit route.

• Know your designated assembly areas for Fire alarms, bomb threats, and severe weather.

Learn and become familiar with the signaling methods/devices used in emergencies by your LEA. If distinct signals are used based on an emergency, know the distinction, so you may react appropriately during a given emergency.

Hazard Hint: Be prepared for emergencies by practicing during fire, bomb threats, tornado and lockdown drills. Think and visualize each type of emergency through prior to it happening, practice in your mind i.e., Where is my closest exit? Where is my outdoor assembly area? Where is my tornado shelter? Is there a fire alarm pull station in my building and if so where is it? Where is the automated external defibrillator (AED)? What information do I need to write down during a bomb threat and immediately after? If there is workplace violence, have you visualized running or hiding and fighting as a last resort?

When an Emergency Occurs:

- Immediately respond by following LEA or School plans for the appropriate emergency response.

- Follow your LEA or School plan for the assistance of persons with disabilities.

- If a fire alarm sounds, always immediately evacuate the building.

- Do not run. Do not use elevators. Use stairwells in multi-story buildings. Report immediately to designated assembly area outside the building.

- If you have a visitor, escort them to your designated meeting area. Do not re-enter the building after an emergency evacuation until you have been instructed by management.

Hazard Hint: Almost every stairwell in North Carolina is approved as an AREA OF REFUGE for employees to stay in if they have mobility issues and can't walk down the stairs during a fire evacuation. The fire department must be notified if any occupant remains in the building.

ELECTRICAL SAFETY

Training by your supervisor is essential for all work environments. It shall include basic information on electrical safety as it relates to that environment. Employees whose jobs require them to work on or near exposed energized parts are required to be trained in electrical-related safety practices that pertain to their respective job assignments.

Electrical work shall follow all federal and LEA requirements and good industry practices. To the maximum extent possible, work on electrical equipment or circuits shall be done with the power off.

A safety warning and tagging system shall be used to ensure that all power is removed from the system. (See the Lock-out/Tagout section for more information). Circuits shall be checked with the proper equipment before work is started to ensure that no voltage is present.

The non-current carrying metal parts of portable and/or plug connected equipment shall be grounded or protected by an approved system of double insulation.

Extension cords used with portable electric tools and appliances shall be three-wire grounded type and protected by (GFCI's) Ground Fault Circuit Interrupters.

Hazard Hint: Never use a cord or plug with evidence of burning, melting or any other visible damage. If the insulation is damaged or missing, or the cord has come loose from the plug, replace the whole thing; never use a cord repaired with electrical tape.

Keep working spaces, walkways and similar locations clear of cords so as not to create a hazard to employees.

Worn, frayed or damaged electric cords or connectors shall not be used and shall be tagged, “Danger, Out of Service, Do Not Use” until repaired.

Three pronged extension cords can be used as “temporary wiring” for up to 90 days or kept unplugged in training rooms.

Extension cords should not be used in tandem.

Never plug a power strip/surge protector into another power strip/surge protector.

Extension cords cannot be used for permanent wiring.

Two pronged extension cords are prohibited.

Extension cords shall be protected from accidental damage which may be caused by traffic, sharp corners, or projections, pinching in doors or elsewhere.

Hazard Hint: As harmless as it seems, using a 100-watt bulb in a 60-watt fixture (for example), can melt the fixture wires, creating a shock and fire hazard. As for appliances, don't use any device that sparks, smokes, buzzes, or emits a burning smell. Never operate an appliance or equipment while standing in water.

Ground Fault Circuit Interrupters

Ground Fault Circuit Interrupters (GFCI) shall be used on power circuits serving outlets in damp, wet or outdoor locations and in any other areas where people using electrical equipment may become grounded.

Hazard Hint: Ground Fault Circuit Interrupters (GFCI) constantly monitor current flowing through a circuit and with a small difference of current will interrupt power before you are exposed to the current and get shocked. A GFCI works even on two-slot receptacles. If you own an older home consider adding to possible wet locations i.e., kitchen, bathroom, laundry room, garage, outdoors, or crawl spaces.

Temporary Wiring and Lighting

All receptacle outlets at construction sites that are not a part of the permanent wiring of the building or structure shall have approved ground-fault circuit interrupters. These outlets shall comply with the National Electrical Code (NEC) and NC-OSHA requirements.
Temporary wiring shall be de-energized when not in use. Temporary lights shall be equipped with guards to prevent accidental contact with the bulb. Guards are not required when the construction of the reflector is such that the bulb is deeply recessed. Temporary lights are designed for this means of suspension.

ERGONOMICS

Ergonomics is the science of fitting the job to the worker. When there is a mismatch between the physical requirements of the job and the physical capability of the worker, musculoskeletal disorders (MSDs) can result. Musculoskeletal disorders (MSDs) are a category of injuries that affect the body's muscles, bones, ligaments, tendons, and nerves. Where feasible, the following MSD risk factors should be avoided: repetition and inadequate work/rest scheduling, forceful exertions, awkward and extreme positions of the body and sustained or static positioning of the body. Be sure to report to your supervisor any existing discomforts that last more than a week. If you and your supervisor are unable to identify the source or find a solution, contact your Safety and Health Leader for assistance.

As a LEA employee, you are in the best position to evaluate the tasks you do each day whether it is computer data entry, microsurgery or plumbing. The tips provided below are intended to provide you with the information and basic tools necessary to assess and correct your own job.

If a repetitive job is awkward, try to find a better way to accomplish it.

- When using vibrating tools, try to insulate the vibration from your hands with gloves, padding, etc.

- Keep your wrists in a neutral position as much as possible, not bent or twisted.

- Use your whole hand to grasp objects, not just your thumb and
- index finger.

- Alternate easy and hard tasks that require the use of your hands.

- Give your hand and wrist time to recover after forceful movements.

- Don't carry heavy objects for long periods. Use jacks, carts, dollies, etc. whenever possible.

- Increase the diameter of the handles of tools and equipment with tape, foam or other materials to help reduce the force of your grip and to spread the pressure move evenly over the hand.

- Keep your hands warm to promote circulation.

- Avoid sleeping on stomach or hands or with your hands bent at the wrist. Curl up on one side with a pillow between the knees or on back with pillow under the knees.

- Sit with your knees slightly higher than your hips with lower back against a firm backrest or pillow and feet flat on the floor or foot rest. Avoid leaning forward and try to allow your hips to support your torso.

- When driving move seat forward so wrists rest at 9 & 3 o'clock of steering wheel for better positioning and don't forget to check the position of the mirror and BUCKLE YOUR SEAT BELT!

- When standing, stand straight and maintain lumbar curve. Avoid bending at the waist. For prolonged standing, use a low footstool for alternate resting of your legs and altering your stance.

Hazard Hint: To avoid sprains and strains; eat a well-balanced diet to keep muscles strong, maintain a healthy weight, exercise every day, and warm up and stretch prior to physical exertion.

Computer Workstations

Here are some suggestions for setting up your computer workstation properly:

Adopt a neutral posture. Sit with your lower back against the chair, your upper legs parallel to the floor and your feet flat on the floor or on a footrest.

Adjust your table and chair so that your elbows are bent at right angles and your forearms are approximately parallel to the floor.

Keep your wrists neutral (straight) by using a wrist rest that is the same height as the keyboard.

Place your mouse (or other pointing device) on a surface close to and at the same height as your keyboard.

Position your monitor directly in front of you, approximately an arm's length away, with the top of the screen at or slightly below eye level. Tip the monitor back at an angle similar to that used when reading a book.

Use a document holder to position work at eye level and close to the screen.

Adjust your lighting and monitor to prevent glare or use an antiglare filter.

To prevent eye fatigue, give your eyes a break from the monitor at least once an hour for several minutes. A great practice is to take 20 seconds to look away from the computer screen every 20 minutes of computer use time and don't forget to blink once and a while to keep your eyes from being dry.

When performing tasks involving repetitive motions or awkward positions, take periodic stretching breaks or alternate with other tasks.

Hazard Hint: Employees should get up every hour and move to prevent discomfort.

Fall Prevention

Slips, trips and falls in LEA government are the number one cause of injuries. Many of these incidents can be prevented by following these procedures.

- When walking, maintain an erect posture and watch where you are going.
- To prevent slips and falls select shoes that are slip-resistant, comfortable, supportive and compatible with your work environment.
- Wear shoes at all times.
- When stepping down from a height of more than eight inches, step down backwards, not forward.
- Running in the workplace is not permitted.
- Always use handrails when using stairways.
- Proper attention should be given to the act of going up and down stairs. Falls on stairs occur when persons are distracted through conversation or by turning to another person while descending.
- Prevent fall hazards by keeping stairs, walkways, aisles and walk areas clear of boxes, loose materials, wires and other objects.
- Use caution when walking on surfaces which contain ice, snow, rock, oil, water or other adverse or unstable material, or condition.

- Immediately clean up spills.

- Do not stand or climb on a desk, chair, or other unstable surface to reach for an object. Use a ladder. (See section of Portable Ladders and Scaffolds).

Hazard Hint: Many slips, trips and falls are caused by being distracted while walking and using a cell phone or carrying belongings that block your view of the walkway.

Fire Prevention

- Know the emergency plan for your work area. Request a copy of the Emergency Response and Evacuation Plan from your supervisor.

- You have a personal responsibility in the prevention and control of fires. Familiarize yourself with the location of fire equipment in the area where you work and the proper method of turning in a fire alarm. If you are to use portable fire protection equipment (such as fire extinguishers), you must be trained in the use of portable fire protection equipment and updated as necessary.

- Obey all rules, regulations and signs for fire safety such as those controlling smoking, open flames and other sources of ignition and those controlling the storage, handling and use of flammable liquids or other hazardous materials.

- Practice good housekeeping and fire prevention.

- Flammable liquids shall be handled and stored in approved safety containers equipped with flame arrestors and spring actuated caps.

- Do not store acids and bases or oxidizers and reducers in the same cabinet due to the possibility of extremely violent reaction between the two.

- Store all poisons separately.

- Keep hand operated fire equipment such as extinguishers, hoses, etc. fully accessible, mounted, and unobstructed at all times.

- If you use a fire extinguisher or any other fire equipment, notify your supervisor at once so that it can be immediately replaced and serviced.

- If your clothing catches fire, smother the flames by rolling on the floor or ground. Never run, as this could cause the flames to spread. Current studies recommend not using a fire blanket as this funnels the fire toward the face and feet.

Hazard Hint: The number one cause of smoke related building evacuations is microwaved popcorn. It is a good practice to stay at the microwave and stop the microwave well before the last kernel pops

- Do not clean clothing with gasoline, solvents or other flammable gases or liquid. A spark may ignite your clothing.

- Do not use oil or grease on any oxygen equipment such as cylinders valve connections. Oxygen under pressure unites with oil and grease with explosive violence.
- Flammable solvents and cleaning solutions shall be dispensed only from approved safety containers.

- Solvent soaked or oily rags used for cleaning office equipment shall be kept in metal, self-closing waste cans and contents properly disposed of daily.

- Smoking is prohibited inside LEA buildings.

- Solvents shall be handled carefully to avoid personal injury or possible damage to materials and equipment.

- Do not throw matches, cigars, cigarettes, etc., into wastebaskets; smoldering butts can cause fires. Outdoor ashtrays should be made of non-combustible material, large and deep enough to prevent butts from spilling, rolling off or falling out.

- Displays and decorations shall be fire retardant or non-combustible.

- Keep decorations out of aisles, stairs, passageways, and exits.

- Before using any decorative electric lighting device, check for lose connections, frayed wiring, broken sockets, or other defects. Any defective electrical device shall be replaced or repaired. Electrical devices shall bear the listed label, i.e. UL, FM, etc.

- Always disconnect decorative lighting when leaving the work area for the day.

- All electrical appliances with a heating element shall be unplugged at the end of the workday.

Hazard Hint: **The best way to practice fire safety is to make sure a fire doesn't break out in the first place. This means being aware of potential hazards in your home and or in your workplace. Be pro-active by changing your batteries in your smoke detectors once a year. Have a fire extinguisher in your home. Plan escape routes, have a meeting place outside home or building and practice.**

FIRST AID

First aid is the immediate emergency treatment provided for injury or sudden illness before professional medical care is available. First aid kits are required in all workplaces. First aid kits should be available for treatment of minor cuts and scratches. The availability of first aid kits is not a substitute for obtaining medical treatment. Routine administration of first aid for other than minor cuts and scratches must be performed by certified or trained first aid personnel (by the American Red Cross or N.C.; Office of Emergency Medical Services; National Safety Council; etc.) or licensed medical personnel.

If an employee has the symptoms of a medical emergency i.e., stroke, heart attack, etc. the employer has the obligation to call 911 immediately even when the employee does not want to be transported. The employee will be evaluated by EMS and can decide the next step after the evaluation.

Hazard Hint: If a person has the symptoms of a major medical emergency i.e. stroke, heart attack, low or high blood sugar 911 must be called immediately.

It is recommended that an AED be installed in each building. The OSHA First Aid standard (29 CFR 1910.151) requires trained first-aid providers at all workplaces of any size if there is no "infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees." A voluntary first aid team should be trained in First Aid, CPR, AED use and Blood borne Pathogens. Never minimize the seriousness of an injury or illness. If in doubt, seek medical attention.

In the event of an emergency, immediately call for emergency services, locate someone trained in first aid, obtain the AED, and send someone to the front door to direct EMS staff to the scene.

Educate yourself on "hands only CPR". Studies show that citizens who watched the one minute American Heart Association YouTube video were much more successful doing CPR than citizens who had no training.

Universal precautions must be implemented by the first aid provider to protect against infectious disease. (See Biological Hazards - Blood borne Pathogens).

General Housekeeping/Sanitation

Good housekeeping is essential to maintaining safe working conditions.

- Keep your work area clean and material properly stored; keep walkways and floor areas clear of slip, trip and fall hazards.

- Place all waste and debris in designated containers for proper disposal.

• Do not litter. Properly dispose of refuse in suitable waste containers or recycle whenever possible.

• Clean up all water or beverage spills.

• If hazardous chemical spills are identified, barricade the spill area and notify the Safety and Health Leader or designated person for clean-up.

• Store oily waste or rags and other flammable waste in approved safety containers that have lids.

• Maintain three (3) feet clearance from all electrical panels, 150 volts or less. Do not store materials in or near switch boxes, switchboards, in mechanical equipment rooms, attics, in stairwells, and telephone switch gear rooms.

• Do not block or obstruct exit routes.

• Do not obstruct access to fixed ladders, stairways, electrical switches, firefighting, rescue or any other emergency equipment.

• Keep tools stored neatly in designated area and materials securely racked or stored.

• Wash your hands before eating.

Hazard Hint: Storing any combustible material in a stairwell is prohibited since this is a primary exit route.

HAZARD COMMUNICATION PROGRAM

The OSHA Hazard Communication Standard has been revised and now meets the provisions of the United Nations “Globally Harmonized System of Classification and Labeling of Chemicals” (GHS). Two significant changes contained in the revised standard, require the use of new labeling elements and a standardized format for Safety Data Sheets (SDSs), formerly known as Material Safety Data Sheets (MSDSs). The new label elements and SDS requirements will improve worker understanding of the hazards associated with the chemicals in their workplace. To help companies comply with the revised standard, OSHA is phasing in the specific requirements over several years (December 1, 2013 to June 1, 2016).

The NCOSHA Hazard Communication Standard requires employers to provide employees with information concerning the hazards associated with the chemicals in their workplace. This standard requires:

• A written hazard communication program;
• Labels on containers;
• An inventory of chemicals;
• Posting area warning signs; and
• Availability of Material Safety Data Sheets/Safety Data Sheets
• Chemical safety training and information sessions upon initial assignment and when new chemicals are introduced into the workplace.

Laboratories with a Chemical Hygiene Plan are exempt from the OSHA Hazard Communication Standard requirements except for:

• Labels are not to be removed or defaced;
• Maintain SDS/MSDS for each chemical;
• SDS/MSDS should be readily available; and
• Provide information and training, except location and availability of written program

A laboratory that ships chemicals is considered to be a distributor or manufacturer and must ensure that containers are appropriately labeled prior to shipment and a SDS is provided to other distributor(s) or employer(s).

Laboratories must comply with all Hazard Communication elements for non-lab chemicals being used e.g. housekeeping, maintenance activities.

Responsibilities

The LEA or School head is responsible for compliance with the provisions of the Hazard Communication Program. Specific responsibilities include the periodic review of LEA or School operations that use or store hazardous chemicals to ensure that:

• Containers are properly labeled;
• Appropriate signs have been posted;
• Chemical safety training has been provided; and
• An inventory of hazardous chemicals is maintained.

The Safety and Health Leader/Safety Coordinator will coordinate implementation of the Hazard Communication Program.

Definition of Hazardous Chemicals

As identified in the Hazard Communication Standard, chemicals with one or more of the following physical, health or environmental hazardous properties are subject to the Standard:

Physical Hazards:

- Explosives
- Pyrophoric Liquids or Solids
- Flammable Gases, Aerosols, Liquids, Solids
- Oxidizing Gases
- Gases under Pressure
- Self-Reactive Substances
- Corrosive to Metals
- Self-Heating Substances
- Substances which, in contact with water emit flammable gases.
- Organic Peroxides
- Oxidizing Liquids or Solids
- Acute Toxicity

Health Hazard:

- Germ Cell Mutagenicity
- Skin Corrosion/Irritation
- Serious Eye Damage/Eye Irritation
- Respiratory or Skin Sensitization
- Aspiration Toxicity
- Carcinogenicity
- Reproductive Toxicology
- Target Organ Systemic
- Toxicity - Single Exposure
- Target Organ Systemic
- Toxicity - Repeated Exposure

Environmental Hazard:

- Hazardous to the Aquatic Environment
- Acute Aquatic Toxicity
- Chronic Aquatic Toxicity
- Bioaccumulation Potential
- Rapid Degradability

Labels and Other Forms of Warning

Chemical manufacturers, importers, or distributors are required to ensure that each container of hazardous chemicals is labeled per GHS requirements. Some GHS label elements have been standardized (identical with no variation) and are directly related to the endpoints and hazard level. Other label elements are harmonized with common definitions and/or principals.

GHS Label Elements·

The standardized label elements included in the GHS are:

- Symbols (hazard pictograms): There are nine pictograms that convey health, physical and environmental hazard information, assigned to a GHS hazard class and category.

- Signal Words: “Danger” or “Warning” are used to emphasize hazards and indicate the relative level of severity of the hazard, assigned to a GHS hazard class and category.

- Hazard Statements: Standard phrases assigned to a hazard class and category that describe the nature of the hazard.

- Precautionary Statement: A phrase that describes recommended measures to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling of a hazardous chemical.

LEA’s and Schools are to ensure that chemicals they receive are labeled with the identity of the hazardous chemical(s) and appropriate hazard warnings.

Workplace and Laboratory containers must be labeled with the same label as shipped containers or with label alternatives that meet the requirements of the revised HCS i.e. Hazard Rating and the Hazardous Material Information System (HMIS) are permitted for workplace and laboratory containers.

Secondary containers (portable containers) that are used immediately by the employee handling the container and the contents used completely are not required to have a GHS label.

Warning signs will be displayed in areas where there may be airborne hazardous chemicals. This would include areas such as welding; operation of internal combustion engines; indoor applications of paint, or adhesives; grinding and sanding operations; and removal of asbestos containing materials. The person responsible for producing the above potentially hazardous environments is responsible for posting the area warning signs. All pipes containing hazardous chemicals will also be labeled.

Chemical Inventory

A current inventory of all hazardous chemicals present in the workplace is to be maintained. The inventory should be kept with the Safety Data Sheet SDS/ (MSDS) file.

Hazard Hint: To prevent chemicals from becoming outdated and possibly unstable, expiration dates should be written on the label or included in the inventory list.

Safety Data Sheets (SDS) / Material Safety Data Sheets (MSDS)

By 2016, if the chemical is still in the physical inventory each LEA/School must replace the old MSDS's with revised SDS's. When the manufacturer is no longer in business, or you have stopped receiving product from the supplier, the product label must be updated to meet GHS requirements. Color printing is not required on product labels, secondary containers or the SDS. Workplaces are encouraged to consume these chemicals before this date.

Chemical manufacturers are required to update their Material Safety Data Sheets (MSDS) by June 1st, 2015 to comply with the format of the new Safety Data Sheet (SDS). MSDSs will have to be converted to SDSs by December 1, 2015. The manufacturer or distributor will supply you with new SDSs. Remember to replace your MSDS's with the new SDS's in your Right-to-Know book. OSHA 1910.1020 defines an "employee exposure record" to include the MSDS. The MSDS must be held and maintained at least 30 years.

Any initial shipment of a chemical requires an SDS/MSDS. It is anticipated that LEA worksites will have both MSDS's and SDS's until manufacturers comply with this regulation.

The SDS/MSDS contains detailed information about physical and chemical properties of the chemical, the physical and health hazards, safe handling precautions, spill clean-up procedures, emergency and first aid procedures. The SDS has 16 sections in a strict order, including hazard information in section 2 that includes information prescribed by GHS such as signal words, pictogram information, hazard Statements and often precautionary information. An MSDS on the other had has lots of different acceptable formats.

LEA's and Schools are to maintain received SDS's/ MSDS's and make them readily available to their employees in a file, notebook, computer access, or by FAX upon request. If an SDS/M SDS for a chemical is not received, contact the chemical manufacturer or distributor to obtain the SDS/MSDS. Efforts to obtain the SDS/ MSDS are to be documented by either a telephone log or with copies of correspondence.

Information and Training

Employees will receive effective information and training on hazardous chemicals in their work areas at the time of their initial assignment, and whenever a new physical or health hazard that employees have not been previously trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (such as flammability or carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and material safety data sheets.

Employees shall be informed of:

- The requirements of this section;
- Any operations in their work area where hazardous chemicals are present;
- The location and availability of the written hazard communication program, including the required list of hazardous chemicals, and SDS/MSDS.

Employee training shall include at least:

- Explanation of labels and SDS/MSDS;
- The physical and health hazards of the chemicals in the work area;
- Safe handling procedures;
- Personal protective equipment (PPE);
- Methods used to detect leaks and releases;
- Emergency procedures and how to obtain First Aid; and
- Spill clean-up and waste disposal kits and procedures.

Your supervisor or the Safety and Health Leader/Safety Coordinator may be contacted for Hazard Communication Program Training for new employees. In addition to the general training provided as described in this section, the Work Unit Supervisor is to provide training for the specific chemicals used or stored in the work area and whenever a new hazard is introduced. A record of training provided by the LEA or School will be maintained in the employer's files for review by OSHA inspectors. A copy will be forwarded to the Safety and Health Leader/Safety Coordinator for recording in the employee safety training permanent file. The record will include:

- Employee's name;
- ID number;

- Outline of the training;
- Date and time of the training; and
- Name of the person who provided the training.

Contractors

The Safety and Health Leader/Safety Coordinator or designee or Project Coordinator will be notified when contractors are to work in areas covered by the Hazard Communication Program. The Safety and Health Leader or designee or Project Manager will inform the contractor that they may encounter hazardous chemicals at their work location and the name of the LEA or School person(s) from whom chemical safety information is available.

Contractors who use hazardous chemicals at LEA facilities are to provide a list of the chemicals that is brought on the property and to maintain a copy of the SDS's at the work-site.

HEALTH HAZARDS

Health hazards include air contaminants such as:

- Dusts - Asbestos, lead, silica, wood dusts
- Mists - Acid, Oil, Paint
- Gases - Carbon monoxide, waste anesthetic gases, etc.
- Vapors - Degreasing vapors, trichloroethylene, etc.
- Fumes - Metal fumes from welding, cutting and soldering.
- Employees may be exposed to chemical or biological health hazards that have toxic effects on the human body through ingestion, skin absorption or injection or entry through openings in the skin or most often through inhalation of these contaminants.
- Overexposure may result in an immediate acute effect or chronic effects that appear only after years of exposure.
- The Workplace Requirements Program for Safety and Health requires all potential and suspect health hazards be evaluated by trained personnel to determine if a health hazard exists and if so to take precautions are to protect employees. These precautions may include the following in order of selection, product substitution, engineering controls such as ventilation, administrative controls such as rules and regulations and finally personal protective equipment, where the hazard cannot be controlled otherwise.

- Employees should understand their LEA's or School's Hazard Communication Program concerning training, labeling and specific safety precautions for using and handling hazardous materials. Safety Data Sheets (SDS's) that are available to employees describe the hazards in detail.

Hazard Hint: If you think a potential health hazard may exist, contact your supervisor or Safety and Health Leader so that an evaluation can take place and appropriate actions to protect employees.

- BE AWARE OF Hazardous CHEMICALS IN YOUR WORKPLACE.
- READ AND FOLLOW THE LABELS, including ventilation, personal protective equipment and disposal requirements.
- Never mix cleaning compounds or other chemicals.
- Be aware of acute and chronic effects of over exposure to these chemicals.
- Do not work with hazardous materials until you have been trained.
- Report any unusual symptoms to your supervisor and Safety and Health Leader immediately, so medical evaluation can be conducted if necessary.

Laboratory Safety

Hazardous materials in laboratories fall under a different set of regulations than those in other locations. As such, lab workers are required to attend training that describes the OSHA Laboratory Standard, Hazardous Material Handling and Waste Disposal Regulations, where to find chemical safety information, emergency procedures, and required Laboratory Safety Plans. See your supervisor or Safety and Health Leader for the Laboratory Chemical Hygiene Safety Plan.

Basics

- Know the location of all exits, emergency safety equipment and emergency procedures.
- Do not smoke, eat, or drink in the laboratory.
- Do not use your sense of smell to identify chemicals/hazards.
- Do not use mouth suction in filling pipettes with chemical reagents.
- Use a suction bulb or other mechanical device to suction/transfer chemicals.
- Never force glass tubing into rubber stoppers.
- Use safety devices and PPE for handling hot items.
- Label all containers of chemicals including waste containers.
- Confine long hair and loose clothing.
- Never conduct experiments while alone in the laboratory.
- Always wear eye protection when in the lab and additional PPE as required when handling or exposed to chemicals.
- Use the proper laboratory hoods designed to control chemical fumes, mist, vapors, and biological and radioactive agents.

- Turn off all hot plates, open burners and other potentially hazardous devices when leaving the laboratory.
- Work surfaces in the chemical or biological laboratory are to be decontaminated and cleaned daily and after spills.
- Minimize the production of aerosols.
- Do not store food in refrigerators with chemical, biological or radioactive materials.
- Decontaminate solid and liquid waste that contains organisms.
- Properly label hazardous waste for disposal.

Hazard Hint: Contain all hazardous aerosols to prevent exposures.

Lifting

Serious strains often result from improper lifting and handling of boxes and bundles, office supplies, ledgers, office machines, etc. Such objects shall be moved with a hand truck or unpacked and handled in smaller parcels.

- Bulky objects shall be carried in such a way as not to obstruct the view ahead or interfere with the use of handrails on stairways.
- Get proper exercise, maintain a good diet and manage stress. To reduce strain on lower back, build up leg and abdominal muscles and keep off excess weight. Swimming and walking are good exercises for people with back problems.
- Do not place objects on the floor if they must be picked up again later.
- Use a mechanical device, if possible, and inspect the device before use. If the object is too heavy, large or awkward, get help.
- Avoid lifting above your shoulder height. Use a ladder or step stool to move objects at these heights.
- Push rather than pull an object. While pushing, maintain your lumbar curve and push with your legs.
- Always wear slip-resistant shoes and check to ensure footing is firm.
- Check the path before lifting and/or moving the load so you know where to put the load and to ensure the path is clear and well-lighted.
- Spread your feet apart to keep a wide base of support.
- Bend at your knees instead of at your waist and maintain your lumbar curve at all times.
- Hold the object you are lifting as close to your body as possible.
- Avoid a long reach to pick up an object.
- Lift slowly, smoothly and without jerking.
- Avoid unnecessary twisting. Turn your feet, not your hips or shoulders. Leave enough room to shift your feet so as not to have to twist.
- Take your time and use the same techniques when setting down the object.
- Report work-related back pain to your supervisor.

Hazard Hint: Muscle related injuries are the number two reported injury in LEA government. Employee Ergonomic teams are encouraged in working groups that lift, push or pull frequently.

Lock Out - Tag Out - Control of Hazardous Energy

The control of hazardous energy is required before servicing, repair, maintenance, inspection or exposure to equipment or areas where a hazard may be presented by uncontrolled energy, including the flow of solids, liquids or gases into confined spaces or environments. Equipment that has more than one energy source or multiple hazards (Pneumatic, steam, chemical, or hydraulic) shall have written procedures for shut down and start up.

All employees who will be working on equipment where the unexpected energizing, start-up or release of hazardous energy could cause injury shall be trained and follow the Lock Out/Tag Out (LO/TO) procedure that follows the NCOSHA 29 CFR 1910.147.

Lock Out is the process of blocking the flow of energy from a power source to a machine or piece of equipment and keeping it blocked out.

Lock Out is accomplished by installing a lockout device at the power source or energy supply so that equipment cannot be operated and liquids gases or solids cannot be allowed to flow. A lockout device is a lock, block, or chain that secures a switch, valve, or lever in the off position. Prior to working on any equipment, an attempt to start the equipment shall be made to validate the lock out condition.

Locks are provided by your supervisor and can be used only for lockout purposes.

Tag Out is accomplished by placing a tag on the power source. The tag acts as a warning not to operate or restore energy. Tags must clearly LEA: DO NOT OPERATE, and must be applied by hand.

Removal of Equipment or System from Service

This procedure shall include the following steps:

- Preparation for shutdown (including notification of affected employees).
- Equipment or system shutdown
- Equipment or system isolation
- LO/TO Device Application
- Dissipation of Stored Energy
- Verification of Isolation

Release from Lock Out/Tag Out

- Inspection
- Notification of Employees
- Removal of LO/TO Device(s)
- Operation of Energy Isolation Devices

Contact your supervisor for training in LO/TO procedures, locks and tags.

Hazard Hint: Lock Out / Tag Out (LO/TO) is a fairly simple process, yet shortcuts are statistically the 2nd most common source of violations. A key component of LO/TO is identifying and locking out all energy sources prior to starting work.

Machine Guarding

Safeguards on machines are designated to protect you from injury. The basic types of hazardous mechanical motions and actions are:

Motions	Actions
• rotating (including in-running nip points)	• cutting
• reciprocating	• punching
• transverse	• shearing
	• bending

To reduce a potential injury follow these basic rules:

- Safeguard any machine part, function or process which may cause injury.

- Never start a machine unless you have been trained in the use of the machine.

- Never start a machine unless required personal protective equipment (PPE) is on, in use and you are wearing appropriate clothing. (See, PPE section).

- Do not wear loose clothing, neckties, rings or other jewelry. If your hair is long, tie it back.

- Never start a machine unless guards are in place and in good condition.

- Treat an unguarded machine as if it were out of order. Tag the machine “Danger, Out of Order - Do Not Use”.

- Report all missing guards to your supervisor immediately.

- No guard barrier or enclosure should be adjusted or removed for any reason, unless you are trained to do the work, have the permission of your supervisor and adjust machines as part of your job.

- Never service or perform maintenance on a machine without disconnecting power and implementing the lockout - tag out procedure.

Hazard Hint: Keep your guard up with machine guards; take the time to select the appropriate safeguards and devices for machinery in your department. After all, what you are really doing is safeguarding the health & well being of you and your co-worker.

Medical Surveillance

When you work with certain toxic chemicals, infectious diseases, biological agents, excessive noise, or wear respiratory protection, you are required to be medically evaluated. This evaluation may include periodic physicals, blood or other biological testing and other tests such as audiometric or pulmonary evaluations. If you work with any of these, check with your supervisor and your Safety and Health Leader for specific requirements in the North Carolina Occupational Safety and Health Standards.

Motor Vehicles

Driver's License Requirements

You shall not operate a LEA vehicle or other means of LEA owned motorized land conveyance unless you possess and can present a valid driver's license. Supervisors are required to conduct motor vehicle license checks for all drivers at regular intervals and all drivers shall attend defensive or safe driving training courses. If you are required to drive a LEA vehicle or personal vehicle for LEA business and have had your driving privileges suspended or license revoked, you must report this condition to your supervisor immediately.

Commercial Driver's License (CDL)

Commercial Driver's License are required and must be current for every LEA employee who operates a motor vehicle designed or used to transport passengers or property in the following instances:

- If the vehicle has a gross weight rating of 26,001 or more pounds.
- If the vehicle is designed to transport 16 or more passengers, including the driver, or
- If the vehicle is transporting hazardous materials and is required to display a placard in accordance with the Hazardous Materials Transportation Act (49CFR Part 172, Subpart F).

A special endorsement on a CDL also is required in order to haul hazardous materials, transport passengers, pull double trailers, or drive tank vehicles. Additional information on CDLs is in the North Carolina Commercial Driver's Manual.

Employees required to maintain a CDL are subject to Drug and Alcohol Testing.

Vehicle Operations

- Vehicle operators are responsible for knowledge of and compliance with all LEA and local laws and ordinances governing the use and operation of motor vehicles.

- Before starting, conduct a pre-trip safety check , including a check of all lights, horn, windshield wipers and washer, brakes, tires, fuel gauge, rearview mirrors, seat belts, and windows for clear visibility.

- Drivers are responsible for reporting vehicle defects and maintenance needs in writing to their supervisor, vehicle manager, or rental agent. Vehicles with safety deficiencies are to be removed from service for repairs.

- Drivers shall operate vehicles free of distractions, texting and other forms of digital communication are prohibited. Radio and cellular phone conversations should be kept to a minimum and a hands-free devices used whenever possible.

Vehicle Parking

- Avoid high risk parking areas. Seek well lighted areas. Always set parking brake when parking. Remove keys and lock parked vehicle. Do not leave a parked vehicle running when not attended.

- Whenever possible, position vehicle so that backing will not be necessary. If a vehicle must be backed, it is the driver's responsibility to:

- Visually check the area behind the vehicle immediately prior to backing up,

- Whenever possible, request another employee to check the area in back of the vehicle and act as a signal person. This person shall remain in full view of the driver during the backing operation and clear of the vehicle and other obstructions.

Safety Belts

Seat belts and shoulder harnesses shall be worn by drivers and passengers in LEA vehicles whenever the vehicle is in motion on public or private thoroughfares and roads. Employees who drive their personal vehicles or rental vehicles for LEA business or who are passengers in personal vehicles or rental vehicles being used for LEA business, shall also wear safety belts and harnesses, where provided.

- Infants and children to age four (4) are required to be secured in child safety seats; all children under age 12 in the front and back seats are required to wear seat belts.

Responding to Emergencies

During emergencies, no job is so important that it requires you to operate a vehicle in a manner that is considered unlawful or unsafe. Although it is important when responding to an emergency call to get to the scene as soon as possible, it is your responsibility to drive safely - and arrive safely. An emergency call does not permit you to disregard traffic laws and regulations.

Accidents

Any accident, involving a LEA vehicle, regardless of the extent of the damage, is to be investigated by a police officer with jurisdiction in the area. Accident report forms and instructions are located in the glove compartment of each vehicle.

Hazard Hint: Motor vehicle crashes are one of the leading causes of death in the U.S. By following the rules of our workplace standards we can make this statistic a preventable one. Remember this… Leave sooner, drive slower, and live longer.

Noise

Excessive noise levels may exist when operating certain equipment or machinery. Exposure to high noise levels could result in a gradual loss of hearing which may not be noticeable to the individual.

If noise levels exceed safe limits as prescribed by NCOSHA, employees must be protected by either engineering control or by a hearing conservation program which includes hearing protection (ear plugs or ear muffs) and appropriate hearing tests.

If you suspect you are exposed to high noise levels in the workplace, contact your supervisor so that the noise level can be measured by trained individuals.

Hazard Hint: Hearing loss can happen very slowly or very suddenly: it can be temporary or permanent. NCOSHA LEAs that workers exposed to an average of 85 dBA or more

over an 8-hour period (a normal conversation is 50-60dBA) must be involved in the hearing conservation program. Remember this…Wearing hearing protection is a sound investment.

Off-THE-Job Safety and Health

The LEA of North Carolina is vitally concerned with your safety and health off-the-job as well as at the workplace. Experience indicates, however, that many individuals tend to leave their training at work. Employees should strive to follow the same safe practices in outside activities as they use on the job and to make off-the-job safety and health an extension of the LEA's program.

Hazard Hint: Did you know that 28.5 million people suffered nonfatal medical injuries due to home and community- related incidents? Families need to take the proper safety precautions to prevent unintentional injuries and or deaths.

OFFICE SAFETY

Following safe work procedures in the office can prevent many accidents.

- When walking in a passageway, keep to the right.
- Accidents can result when persons stand in front of doors, so stand away from the path of the door swing.
- Immediately clean up spilled liquids.
- Do not attempt to carry stacks of materials which are high enough to obstruct vision.
- Don't lean from chair to pick up objects on the floor.
- Don't propel a chair across the floor while seated.
- Be careful sitting down. Sit in the center of a chair and not on the edge. Watch out for chairs on casters which can be inadvertently pushed from under you when you attempt to sit down. Place your hand behind you to make sure your chair is in place before you settle into it.
- Don't stand on a chair, stools, or other unstable surface to reach for an object. Use a ladder.
- Don't sit on the edges of desks, tables, boxes, or low filing cabinets.
- Place wastebaskets, briefcases, umbrella stands, and similar objects where they will not present a tripping hazard.

- Dispose of broken glass properly to prevent injury to others during waste handling. Bag and wrap broken glass with heavy paper to prevent penetration by sharp edges and identify contents. Sharps such as razor blades shall be disposed of in an impermeable closed container. Medical waste sharps require immediate deposit in biohazard sharps containers and hazardous materials control for disposal.

- Use with caution, razor blades, knives, scissors, and other objects with sharp edges or points. Keep razor blades in protective containers. Never keep loose razor blades in desk drawers.

- Never fasten envelopes with pins or staples. Exercise care to avoid paper cuts.

- Fasten loose papers together with paper clips or staples, never with pins. Exercise care when loading or using staple machines. Use a proper staple remover for removing staples. Properly dispose of broken staple remover.

- Keep fingers away from the sharp edge of paper cutters. Never leave a cutting knife in a raised position. All guillotine type paper cutters shall have a finger guard; other types of paper cutters shall have proper finger protection.

- Do not indulge in any form of “horseplay”, such as propelling paper clips, rubber bands, etc. “Horseplay” is strictly prohibited.

- Properly store office supplies.

Hazard Hints: It is fairly obvious that safety and health hazards can exist on worksites filled with heavy machinery and equipment, where employees often are required to engage in strenuous manual labor. However, a surprising number of hazards can be present in an office setting. Hazards can be anywhere.

FILLING CABINETS

File Cabinets are a major cause of accidents and should be used with care.

- When caution is ignored, filing cabinets can pinch, cut, crush, or trip a user. Always be alert for a top heavy filing cabinet. It might tip over if a drawer is opened. Heavy cabinets shall be secured to prevent this.

- Exercise care in opening and closing file drawers. Open one file drawer at a time and close it with the handle, making sure your fingers are clear. Never close a drawer with your knee, elbow or any other part of your body other than your hand. Close each drawer immediately after use, even if you plan to reopen it in a short time.

• Never climb on open file drawers.

• Properly store small non-slip stools (used to access upper file cabinets) out of passageways.

• Wear finger guards to avoid paper cuts.

OFFICE MACHINES

Do not place computers - or other office equipment too close to the edge of a desk or other surface.

- Machines that tend to creep during operation shall be fastened down or secured with rubber feet or rubber mats.

- Electric office machines shall be properly grounded or double insulated to safeguard against electrical shock.

- When using paper shredders, position your body far enough away from the opening so that jewelry and apparel (such as ties) will not be accidentally fed into the paper entry port.

- If you are unfamiliar with the proper grounding procedures, see your supervisor. Notify your supervisor of any convenience outlets that are not three-hole grounding receptacles or that are damaged.

- Exercise care to prevent electrical cords on office machines and telephones from becoming tripping hazards. Avoid stretching cords between desks or across aisles. If such a procedure is temporarily unavoidable, employ some means of calling attention to the cord and/or tape the cord to the floor or place in a wire cover.

- Extension cords should not be used. Notify your supervisor if additional outlets are required.

Hazard Hint: Injuries resulting from the use or maintenance of office machines may be incurred directly or indirectly. Safety measures must be taken when maintaining all office equipment, including but not limited to copy and fax machines, printers, and computers.

Personal Protective Equipment (PPE)

Your supervisor's annual hazard assessment of the job will be used to identify required Personal Protective Equipment.

Head Protection - is required to protect employee's head where there is a danger of head injury from impact and falling or flying objects. Class A hard hats are required for construction and general industry where there is no exposure to electrical shock or burns. Class B hard hats are required when additional protection is required to protect the head against high voltage electricity. (Reference, ANSI-Z-89.1-1986.)

Ear Protection - shall be used as required to protect employees from noise when engineering controls cannot reduce noise to acceptable levels.

Eye and Face Protection - shall be used when exposed to hazards such as flying particles, molten metal, dust, chemicals, gases, steam, vapors, objects, biological hazards, potentially injurious glare, light or heat radiation, or other potentially harmful exposures which may cause injury to the eye or face. All eye & face protection shall meet or exceed the requirements specified in the most current ANSI Z 87.1 standard.

Respiratory Protective Equipment - must be used as part of a comprehensive respirator program when required to protect employees from airborne contaminants which, when measured, are above the Threshold Limit Value in NCOSHA Standards. Contact your supervisor for the hazard assessment training and required personal protective equipment.

Foot Protection (safety shoes) - is required to protect employees working in areas where there is a danger of foot injuries due to falling or rolling objects, exposure to piercing the sole or where protection is needed against electrical or chemical hazards.

Protective footwear shall comply with American Society Testing Materials (ASTM) F-2413-05

Hand Protection - as required by established standards to protect employees from physical, biological, chemical, radiation, or electrical hazards.

Gloves used for electrical protection must be marked as to class of equipment and whether or not they are ozone-resistant and shall meet the ASTM D-120-87 Specification for Rubber Insulating Gloves.

Fall Protection - (safety harness, lifelines and lanyards). As required to protect employees from falling while working at heights of six (6) feet or more not protected by standard guardrails or safety nets or as required when working in confined spaces.

LEA Government has a PPE Policy and Guide in the LEA Personnel Manual, and your LEA or School may have specific requirements, therefore, contact your supervisor to determine the equipment needed to perform your job safely.

Hazard Hint: Personal protective equipment, or PPE, is designed to protect workers from serious workplace injuries or illnesses. If such hazards are present in your workplace you are required to wear the appropriate PPE. Have no fear with safety gear!

PORTABLE LADDERS AND SCAFFOLDING

Ladders:

- All ladders must be inspected frequently and rechecked for soundness and proper working condition prior to daily use.
- Ladders which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as “Dangerous, Do Not Use.”
- Check for overhead power lines or obstructions before erecting a ladder.
- Do not use ladders on or near power lines or other electrical devices.
- Trained personnel shall use only listed fiberglass ladders for limited authorized electrical work.
- Straight and extension ladders must be tied-off and secured to the upright structure against which they lean.
- Non self-supporting ladders shall be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one quarter (1/4) of the working length of the ladder (the distance along the ladder between the foot and the top support).
- Non self-supporting Ladders must extend three (3) feet above the point of support of eaves, gutters or roof line and should be tied off.
- Use a ladder with safety feet which are suitable and positioned firmly on the floor, ground, or concrete, which provides a stable flat level surface.
- Work facing the ladder with both feet on the rungs.
- Only one person is permitted on a ladder at a time unless ladder design specifies otherwise.
- Ladders shall not be used as guys, braces, or skids, or for other than their intended purposes for which they were designed.
- Ladders shall be maintained free of oil, grease, and other slippery hazards.
- Ladders shall not be loaded beyond the manufacturers’ maximum rated capacity.
- Maintain a 3-point contact by gripping the side rails with both hands at all times when climbing a ladder. Raise and lower tools or equipment by a hand line and canvas tool bag.

- Do not reach out more than an arm's length from a ladder. If necessary descend the ladder and move the ladder to a better location.

- Step ladders must be fully opened and set level, spreaders locked and all four legs set level on the ground.

- Do not stand on the top step or top cap of a stepladder.

- Do not use the bracing on the back legs of a stepladder for climbing.

- Ladders shall be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached and the movable parts shall operate freely without binding or undue play.

- All mechanical components of the ladder shall be maintained in good condition to ensure proper performance.

Reference OSHA General Industry Standard - 1910.25, 1910.26, 1910.27. Construction. Std. 1926.1054 and 1926.1060.

Hazard Hint: Choose the right ladder for the job. Is the ladder positioned properly? Does the ladder have proper feet and show no signs of damage and is clearly marked with the weight limit? Think safety before you start because chance takers are accident makers.

Scaffolds

The use and construction of scaffolds shall follow all Federal, LEA and Local legal requirements, and good industry practice.

- Only competent employees authorized by the supervisor shall erect scaffolds, platforms and staging. Scaffolds and their parts shall
- be sound, rigid and capable of supporting at least four times their maximum intended loads.

- The footing or anchorage for scaffolds shall also be sound, rigid and capable of carrying four times the maximum intended load without settling or displacement.

- Unstable objects shall not be used to support scaffolds or planks.

- A safe means shall be available to enter the work platform. Raise and lower tools or equipment by a hand line and canvas tool bag. Maintain a 3-point contact by gripping the side rails with both hands at all times when climbing a scaffold.

- Platforms shall be sufficiently wide and secured to prevent slipping.

- Guardrails, toe boards, and outriggers shall be used when necessary. Outriggers shall be used when the maximum work level height exceeds four times the minimum, or least, base dimensions of the scaffold.

- Guardrails and toe boards are required on all open sides where the platform is greater than six (6) feet above the ground or floor. Scaffolds that are six (6) feet above the ground with a minimum horizontal dimension of less than 45 inches shall have both guardrails and toe boards.

- Guardrail screens shall be used where persons are required to work or pass under the scaffolds.

- Employees shall not work on scaffolds during storms, high winds, or during snow and ice conditions, unless all snow and ice is removed and planking/platforms are sanded to prevent slipping.

- Do not use boxes or other means to gain additional work height above that which is provided by the scaffold platform and the protection provided by the guardrails.

- Scaffold wheels shall be lockable and shall be locked when employees are on the scaffold.

- No scaffold shall be moved while in use or occupied.

- No welding, burning or open flame work shall be performed on any scaffolds suspended by fiber or synthetic rope.

- Scaffolds shall not be loaded in excess of the maximum workload for which they were intended.

- Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.

- All other types of mobile or pneumatic scaffolding shall be operated only by trained employees assigned by the supervisor.

- Equipment shall be inspected prior to use and maintained in good operating condition.

- Any defective or damaged equipment shall be tagged “Dangerous, Out of Service, Do Not Use”.

All scaffolds, platforms, and staging shall comply with OSHA General Industry Standard 1910.28-29 and Construction Standard 1926.451- 453.

Hazard Hint: Every year nearly 100 fatalities and 10,000 injuries occur on scaffolding across the country despite numerous safety regulations aimed to prevent such incidents. Do your part in keeping yourself safe and alive. Inspect scaffolds and scaffold parts daily, before each work shift, and after any event that may have caused damage.

Powered Industrial Trucks/material

Handling Equipment

- Do not operate equipment unless you have been trained or are receiving training from a qualified person.

- Operators of forklifts and other specialized vehicles shall be properly licensed for the equipment being operated. This license is in addition to a NC vehicle operator's license.

- All vehicles shall receive a thorough inspection prior to operation. This should include fluid levels (oil, water, hydraulics), brakes, horns, tires (if so equipped), steering, all running lights, safety warning lights, fire extinguisher and any other components that are important for the safe operation of your machine.

- Defective or damaged items requiring maintenance or repair shall be reported to your supervisor for correction before the use or operation of the equipment.

- Operators should clear steps or ladders as much as possible of snow, ice, and mud before mounting or dismounting equipment. Use handholds or handrails, if they are provided, and follow the same method to exit as used when entering the cab. Never try to step out (frontwards) when dismounting.

- Never jump from the cab or any other part of the equipment.

- Operators shall use seat belts or other restraints where provided.

- Operators shall follow the start-up procedures and system test for the particular machine and shall insure that it is operating properly before attempting any work.

- If, while operating the equipment, the operator detects any unsafe condition or defect in operation, he shall report it to his supervisor.

- Equipment shall be operated in a safe manner at all times, keeping the load under complete control. All manufacturers' operating procedures and load ratings must be adhered to.

- Operators shall obey all speed and traffic regulations and other applicable equipment rules.

- Operators shall be especially cautious when operating where vision is limited.

- Pedestrians must be given their right of way.

- Operators shall not permit passengers to ride on equipment unless the equipment is designed with seats and seat belts to accommodate them.

- Refueling of all internal combustion engines shall be conducted in a well-ventilated area with the engine turned off.

- Smoking or open flames shall not be allowed in the refueling or battery recharging area. Facilities for eye drenching/eye wash stations shall be provided in the immediate area of all designated battery charging stations.

- All equipment shall be secured in the proper manner at the end of the work shift. Forks, blades or buckets shall be lowered to ground level and master controls and levers placed in the proper positions. All brake systems must be set.

- Your Safety and Health Leader, supervisor, or designated trainer will provide you with additional information on your particular machine. However, remember that your own good judgment as well as common sense are important in the safe operation of your equipment.

Hazard Hint: Safety for pedestrians is often overlooked in lift truck safety programs. When operating trucks or heavy machinery use warning devices, slow down, make eye contact with pedestrians and never talk or text on your cell phone.

Tools - Hand and Power

- Use required Personal Protective Equipment safety glasses, safety goggles and face shields, etc. when operating or working near hand or power tools.

- Hand and power tools shall be maintained in safe operating condition.

- Power operated tools and equipment guards shall be inspected before each use and shall not be removed or tampered with.

- Portable electric power tools shall be double insulated or grounded, using a three conductor cord and a three prong plug. Electric on/off switches shall operate properly.

- Any damaged, defective, or unsafe plug, cord or tool shall be reported to your supervisor immediately. The Tagout program shall be implemented. (See Lockout Tagout section).

- Tools and other materials shall not be left on stepladders, scaffolds, roofs or other places where they may be dislodged and fall.

- Impact type hand tools such as drift pins, wedges, and chisels shall be kept free of mushroomed heads.

- The wooden handles of tools shall not be cracked or splintered and shall be kept tight in the tool.

- Floor and bench mounted abrasive wheels shall be provided with safety guards (protection hoods), maximum exposure shall be not more than 90 degrees.

- All bench grinders shall contain a safety guard and grinding wheel maintained for safe operation.

- Work rest must be rigidly supported and readily adjustable.

- Work rest shall be kept at a distance not to exceed one-eighth (1/8) inch from the surface of the wheel. Side grinding is not permitted.

- Tongue guards shall be installed and maintained within 1/4" of the wheel.

- Grinding wheels shall fit freely on the spindle and not be forced on.

- All employees using abrasive wheels shall be protected by eye protection equipment which meets ANSI-Z-87.1-2010 and the eye shield should be maintained and permanently attached to the floor or bench grinder.

- All fixed power driven metal or wood working tools and equipment shall be provided with a labeled disconnect switch near the tool or equipment that can either be locked or tagged in the off position.

- All portable, electric circular saws shall be equipped with guards above and below the base plate or shoe. When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to the covering position.

Powder Actuated Tools

Any proposed use of powder actuated tools shall be both coordinated with and have the authorization of your supervisor and the supervisor of the area in which the tool will be operated and the Safety and Health Leader.

Powder actuated tools shall be operated:

- Only by employees licensed for the make and model of the tool being used. The operator shall have the license at the job site during firing.

- The powder actuated tool shall be protected at all times from misuse or unauthorized use by:

    1. Being in the hands of the operator

    2. Being locked in a container

    3. Being removed from the site.

- Follow all manufacturer safety instructions when using powder actuated tools.

Hazard Hint: Tools are such a common part of our lives that it is difficult to remember that they may pose hazards. Before use of tools, learn to recognize the potential hazards associated with that tool. Remember…unsafe acts will keep you in stitches!

Trenching and Excavations

Excavation work shall follow LEA legal requirements, including Building Code Requirements and N.C. Occupational Safety and Health Standards (NC OSHA Standard 29CFR 1926, Subpart P). Excavations include, but are not limited to, operations such as drilling, digging and trenching.

The following brief overview of safety controls must be followed in addition to all specific requirements which are required for the job and by N.C. Occupational Safety and Health Standards.

- Before any excavation work begins, underground utilities shall be identified and the location marked of underground pipes, electrical conductors, gas lines or other structures.

- Evaluation is required of the trenching site by a “competent person” who knows and is trained to identify soil types, proper protective systems and hazardous conditions.

- Competent person - one who is capable of identifying existing and predictable hazards in the working area and who has authority to take prompt corrective action to eliminate hazards and to stop work in hazardous excavations.

- Conducts a daily inspection of the excavation and the adjacent areas prior to work and as needed during the workday.

- If there are any unsafe conditions, work shall stop in the excavation and personnel shall be removed until the problems are corrected.

- Monitor and recognize hazardous atmospheres.

- Monitor and recognize hazardous conditions such as vibration, external loads, weather conditions, ground water conditions and confined spaces.

- Check all protective material or equipment for any damage.

- When excavations are deeper than four (4) feet, ladders or steps shall be located so that a worker does not need to travel more than 25 feet in the excavation before being able to exit. See (NCOSHA) confined space standard 29CFR-1910.148 for testing before employees enter for excavations greater than four (4) feet in depth.

- Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with NCOSHA Standard 1926, Subpart P.

- Protective systems are required for excavations less than five (5) feet in depth whenever examination of the ground by a competent person indicate a potential cave in hazard.

- When excavations are deeper than five (5) feet, the sides shall be provided with a protective system (shored, braced or sloped sufficiently) to protect against hazardous ground movement.

- When heavy equipment will be operated nearby, the shoring or bracing shall be able to withstand this extra load regardless of the depth of the excavation.

- For any excavation that a person will enter, all dirt, debris and excavation material shall be effectively stored or retained at least two (2) feet from the edge of the excavation.

Hazard Hint: Always be on the lookout for materials or equipment that might fall or roll. Provide warning systems and require workers to stand away from vehicles to protect them from being struck.

Signs and Barricades

All excavations into which a person could fall or trip shall be guarded. While work is being performed in or near the opening, the guards surrounding the area shall be maintained. Barricades at least 3 to
5 feet high and spaced no further than ten (10) feet apart shall be provided. Additionally yellow and black “Caution, Do Not Enter” construction tape shall be stretched securely between the barricades. Excavations should be covered and not left open overnight, whenever possible.

Additional illuminated barricades are required where vehicular traffic is possible. (Reference, NCOSHA 29CFR 1910.145 and 1926.202).

Workplace Injuries and Illnesses

If you have an accident or if you are injured on the job you must notify your supervisor. See the Employee Responsibility section of this handbook.
If your injury requires medical treatment, follow the LEA or School procedures regarding medical treatment. With reference to occupational disease, an employee must give notice to the employer when the employee is first informed by a competent medical authority of the nature and work related causes of the illness.

If you have questions about coverage or benefits under workers' compensation you should contact your Workers' Compensation Administrator.

Hazard Hints: Our goal is to improve workplace safety and health through the collection of useful, accessible, specific injury and illness information. With this information we will be able to work together in being pro-active in preventing workplace hazards.

Workplace Violence

Every LEA and School is dedicated to providing a work environment that is free from violence or threats of violence by or against employees and the public we serve. The LEA or School has developed policies and procedures for the prevention and management of violence or treats of violence; this includes but is not limited to holding perpetrators accountable and providing assistance and support to victims. Workplace violence can take a range of forms. It can include, but not be limited to, emotional abuse, intimidation, bullying, harassment, threats, stalking, domestic violence and physical assaults.

Violence or threats of violence, as defined by your LEA or School policy are prohibited. Such behavior on the part of any individual in or on any LEA /School property, including but not limited to, buildings, grounds and vehicles, will not be tolerated. Employees who violate this policy will be subject to disciplinary action up to and including termination. All employees are encouraged to be alert to the possibility of incidents and threats of violence. You are encouraged to report violence or threats of violence you have received, witnessed or have creditable information regarding to your supervisor. If your supervisor is the source of the threat, then the report should be made to your Human Resources Officer. Every effort will be made to protect the safety and anonymity of anyone who reports such employee or concerns. NC Statutory regulations protect against retaliation for any employee who, in good faith, reports a violation.

If you are a victim of workplace violence which includes domestic violence, your LEA or School will make every effort to provide support and reasonable security measures for you. You are encouraged to talk with your supervisor, Human Resources Officer or you may call the employee's' Assistance Program.

Hazard Hint: Workplace violence is a serious problem this country especially when economy and labor markets are weak. Did you know that 52% who work outside their homes have witnessed, heard or have experienced a violent event at their workplace. Everyone deals with stress differently so have a plan in place for prevention.

New Employee Orientation Emergency Contact Information

Emergency numbers:

Facility # for General Emergency:

Medical Emergency, Ambulance or Rescue:

Fire:

Police:

Poison Control Center:

Safety and Health Leader:

Workers' Compensation Administrator:

If you are in danger, sound alarm to others, leave the area. Then immediately report the emergency.

- Give your name
- Phone number you are calling from
- Location of Emergency
- Nature of accident or injuries
- Condition and number of injured, what is being done
- Stay on the phone until told to hang up

Acknowledgement

(Please sign, detach, and return to your supervisor.) I hereby acknowledge receipt of a copy of the North Carolina LEA Safety and Health Handbook

I understand that it is my responsibility to become familiar with and abide by these instructions, insofar as they apply to the duties which I shall perform for LEA/School. (A copy of this certification will be filed with the employee's personnel records.)

Employee's Signature:

_____

LEA or School:

_____

Date:

_____