

# Nebraska Intergovernmental Risk Management Association



## Sarpy County Safety Manual

**Prevention of Major  
Occupational Injuries, Illnesses and Losses**

All rights reserved. No part of this work may be reproduced or copied in any form by any means without the permission of NIRMA, unless by a NIRMA member and for that member's official use.

# Preface

The **Sarpy County Safety Manual** is intended to provide general guidance and assistance to Sarpy County employees for the purpose of reducing or eliminating incidents involving an injury to an employee or damage to property. The goal of this manual is to help employees achieve a **zero-incident** count. The manual is not intended to address specific statutes, standards, rules, regulations, county policies, or hazardous exposures related to providing a safe work environment for employees or the general public.

Sound risk management principles and loss prevention practices are paramount for the reduction and elimination of workers' compensation claims and property and liability losses. The NIRMA Board of Directors has developed and adopted 10 Best Safety Practices for Counties intended as recommendations for reducing and eliminating losses. The **first** Best Safety Practice is to adopt an **effective safety manual** for all employees to receive training on and follow.

This manual is patterned after NIRMA's **Model Safety Manual**.

# Table of Contents

<b>Introduction, Objectives, and Goal</b>	<b>Chapter 1</b>
A. Introduction.....	1.1
B. Objectives.....	1.1
C. Goal.....	1.2
<b>Responsibilities</b>	<b>Chapter 2</b>
A. Responsibilities – Management.....	2.1
B. Responsibilities – Employees.....	2.1
C. County Safety Committee.....	2.2
D. Non-Compliance.....	2.2
<b>Training</b>	<b>Chapter 3</b>
A. Training Program.....	3.1
<b>Drug and Alcohol Use</b>	<b>Chapter 4</b>
A. ....	
Prohibited on the Job.....	4.1
B.....	
Prescription Medications.....	4.1
<b>Reports and Investigation</b>	<b>Chapter 5</b>
A. Incident Statements and Reports.....	5.1
B. Work-Related Injury or Illness.....	5.1
C. Injury, Fatality or Property Damage.....	5.1
D. “Near Hit” or Other Hazardous Conditions or Acts.....	5.1
E. Investigation by Management and County Safety Committee.....	5.2
<b>Emergency Plans</b>	<b>Chapter 6</b>
A. Emergency Plans.....	6.1
B. Fire.....	6.1
C. Medical Emergency.....	6.2
D. First Aid Kits.....	6.3
E. Weather.....	6.3
F. Bloodborne Pathogens.....	6.4
G. Violence in the Workplace.....	6.5

H. Terrorism.....	6.5
I. Harassment.....	6.5

**General Safety**

**Chapter 7**

A. Be Observant of Surrounding Conditions.....	7.1
B. Use Personal Protective Equipment.....	7.1
C. Poor Housekeeping.....	7.1
D. Lifting or Exerting Force .....	7.1
E. Use of Ladders Versus Use of Non-Approved Objects .....	7.2
F. Report Defective Equipment and Safety Hazards .....	7.2
G. Work Habits.....	7.2

**Office Safety**

**Chapter 8**

A. General.....	8.1
B. Ergonomics .....	8.2
C. File Cabinets.....	8.4
D. Material and Office Supply Storage.....	8.4
E. Cutting and Attaching Equipment.....	8.4
F. Office Furniture and Equipment.....	8.5
G. Electrical Equipment and Cords.....	8.6
H. Space Requirements .....	8.6
I. Housekeeping .....	8.7
J. First Aid Kits .....	8.7
K. Indoor Air.....	8.8

**Shop Safety**

**Chapter 9**

A. Lifting or Exerting Force .....	9.1
B. Protective Eye Wear .....	9.1
C. Machine Guarding.....	9.2
D. Compressed Gas Cylinders.....	9.2
E. Welding and Burning Operations .....	9.2
F. Battery Changing or Charging Operations.....	9.2
G. Safety Signing.....	9.3
H. Use of Tobacco Products Indoors .....	9.3
I. Housekeeping .....	9.3
J. Employee-Owned Equipment or Tools.....	9.4

**Personal Protective Equipment (PPE)**

**Chapter 10**

A. General Guidelines.....	10.1
B. Employee Responsibilities .....	10.1

C.	Protective Eye Wear .....	10.2
D.	Respiratory Equipment Selection, Maintenance and Storage .....	10.3
E.	Hearing Protection .....	10.3
F.	Head Protection .....	10.4
G.	Safety Vests .....	10.5
H.	Fall Protection .....	10.5
I.	Footwear.....	10.5
J.	Clothing and Gloves .....	10.6
K.	Special Personal Safety Equipment .....	10.7
L.	Inspection, Maintenance and Storage of PPE .....	10.7

## **Hand and Power Tool Safety**

## **Chapter 11**

A.	General.....	11.1
B.	Use and Care.....	11.1

## **Ladder Safety**

## **Chapter 12**

A.	Ladder Hazards.....	12.1
B.	Accident Prevention .....	12.1
C.	Ladder Selection .....	12.1
D.	Ladder Maintenance.....	12.2

## **Chemical Safety**

## **Chapter 13**

A.	Handling, Mixing and Using Chemicals.....	13.1
B.	Hazardous Materials Use, Spills and Exposures.....	13.1
C.	Emergency Care .....	13.2

## **Vehicles and Equipment**

## **Chapter 14**

A.	Vehicle and Equipment Safety .....	14.1
B.	Driver Training Program.....	14.2
C.	Loss of Driving Privileges.....	14.2
D.	Driving Record Review .....	14.3
E.	Personal Restraint Systems .....	14.3
F.	Commercial Driver's License .....	14.3

## **Additional High-Risk Areas**

## **Chapter 15**

A.	Railroad Rights-of-Way .....	15.1
B.	Trenches and Excavations .....	15.1
C.	Heights Greater than Six (6) Feet .....	15.2

D. Confined Spaces ..... 15.2  
E. Lockout/Tagout Program ..... 15.3

**Employee Acknowledgement**

**Reimbursement Policy**

# Chapter 1

## Introduction, Objectives and Goal

### A. Introduction

The most important asset Sarpy County has is its employees. In order to provide maximum protection for employee safety and health, the officials of Sarpy County have adopted the following safety policy. This policy applies to all officials and employees of the county and applies to the job being performed by each employee at any given time. For example, if a highway maintenance employee is performing administrative functions such as clerical work, the applicable standards found in this manual for clerical work apply. If an official is performing maintenance work on equipment, those applicable standards apply.

County government is continually faced with escalating costs that can have both an indirect and direct effect on its efficient operation. In many cases the cost is determined by uncontrollable circumstances.

However, there are costs the county can effectively control – injuries or illnesses that result in workers' compensation claims and claims that result from unsafe acts of employees. By implementing an effective and efficient safety policy through the County Board, each office and department, and including every employee, work-related injuries, illnesses and unsafe work practices and the associated claims can be reduced. The costs associated with claims have a direct impact and effect on the insurance premiums the county pays.

### B. Objectives

As stated earlier, the most important asset county government has is you, the employee. One of our main objectives is to reduce and eliminate incidents that result in an injury or illness not only to you, but to any of our employees, or members of the public.

Most incidents (more than 90 percent) have been determined to be **preventable**. Most **preventable** incidents can be attributed to one of the following causes:

- Ergonomically poor work habits or conditions.
- Failure to be aware of surrounding conditions.
- Failure to report defective equipment and its continued use.
- Failure to use personal protective equipment.
- Improper entry or exit from vehicles or equipment.

- Failure to operate vehicles or equipment safely and defensively.
- Failure to use handrails.
- Improper use of ladders or substituting non-approved objects such as chairs, desks, counter tops.
- Lack of training.
- Failure to follow written policy, procedures, training, or directions.
- Lifting or exerting force improperly.
- Improper footwear.
- Poor housekeeping.
- Running up or down stairs or inclines.

The objectives of this manual are to address each of the classifications of incidents and provide preventability measures and techniques that are easily implemented, clearly understood, and cost-effective.

### C. Goal

The goal of county officials, department heads, supervisory personnel, the County Safety Committee, and every county employee is **zero incidents**. Working toward that goal will take the full support and cooperation of each level of county government. It involves the implementation of a plan of action addressing the major incidents which are costly to both to the injured employee and the county.

Every county employee should understand that insurance premiums are affected by the losses the county incurs and come directly out of the county budget. The money spent on premiums and losses is therefore not available to use for other purposes. In reaching for a **zero-incident** goal the possibility exists that additional funding could be made available for such uses.

This manual addresses how you, as an employee, with the assistance and direction of management – officials, department heads and supervisory personnel – can control such incidents and work toward achieving Sarpy County’s **zero-incident** goal. This manual will provide concise and easy to understand guidance you will require to be informed and comply with the safety standards adopted by Sarpy County.



# Chapter 2

## Responsibilities

### A. Responsibilities – Management

Every county official and department head have the responsibility to provide a safe and healthy work environment for the employees they supervise. Throughout this manual, specific responsibilities are directed toward the department head. However, the responsibility may be delegated to another county employee, but the accountability will rest with the department head.

The term “management” is defined as meaning an official or department head with responsibility for the office or department and having supervisory authority of employees. Management delegates the responsibility for developing and implementing an effective and efficient safety and health program to the County Safety Committee with assistance from all officials and department heads.

The Safety Committee shall be established in accordance with Neb. Rev. Stat. §§ 48-433 to 48-447, as amended, and the Nebraska Department of Labor Workplace Safety Consultation Program regulations, Title 230, Chapter 7. The Safety Committee serves primarily in an advisory capacity; management retains full authority, responsibility, and accountability for this policy.

### B. Responsibilities – Employees

It is the responsibility of every county employee to comply with the safety and health guidelines in this manual and written or oral directives that may be provided prior to beginning a job or while on the job.

You are encouraged to actively participate in the county safety and health program by:

- Following the safety and health guidelines of this manual.
- Complying with directions of supervisory personnel.
- Attending and actively participating in training sessions.
- Offering safety and health suggestions.
- Reporting “near hits,” new hazards and unsafe acts.
- Reporting all personal injuries and damage to equipment, vehicles or county property; and,
- Reporting unsafe work environment, equipment, vehicles or machinery.

**The life you save or the injury you prevent may be your own.**

## **C. County Safety Committee**

The primary responsibilities and functions of the County Safety Committee are as follows:

- Implement the written injury prevention program developed by management or develop its own written injury prevention program for approval by management.
- Ensure the written program is a clear, concise set of safety and health guidelines that address the known occupational hazards developed from a Job Safety Analysis. This program is to be followed by all county employees.
- Continue expanding this program by developing a workplace injury prevention program and updating the program on a continuing basis.
- Assist in implementing and updating Job Safety Analysis of known hazards.
- Assist in developing the Emergency Plan and conducting annual drills.
- Investigate each incident which has or could have caused an occupational injury, injuries occurring in or on county property, damage to county property, damage to personal property by a county operation, or liability to the county.
- Make written suggestions, based on the findings of the investigation, to the proper county authority to eliminate the recurrence of such an event or a reduction of the exposure.
- Conduct semiannual safety and health audits of all county facilities and submit written reports of the findings to the responsible official or department head with suggestions for correcting any deficiencies.
- Assist management in setting up and conducting safety and health training programs.
- Use outside safety and health resources whenever possible, whenever needed and available.
- Assist each office or department in developing regular safety meetings in addition to those meetings that may be otherwise required by law (Refer to Training in Chapter 3).
- Designate a subcommittee responsible for reviewing and updating this safety manual.
- Address employee concerns in the area of safety and health and respond in writing to all concerns submitted.
- Provide management with written reports on all its activities and with suggestions for improvement in any area found deficient; and,
- Conduct a minimum of four committee meetings annually.

## **D. Non-Compliance**

A county employee found in non-compliance with one or more of the requirements of this safety manual will be subject to appropriate disciplinary action as found in the county's Collective Bargaining Agreements, Personnel Rules and Regulations, Personnel Policies and Procedures Manual, and/or County-wide Policies.

# Chapter 3

## Training

### A. Training Program

You will not be expected to perform a job until you are properly trained and qualified by management.

In most instances your prior job duties have qualified you or you have been trained on the job or otherwise informed of the duties to be performed. You will not be asked to use any unsafe equipment. Defective equipment, including tools, will be repaired or replaced prior to use. If defective, employees are to notify their supervisor.

The training program developed by the County Safety Committee, with assistance from management and employees, while addressing existing safety standards, is aimed in the direction of doing what is right the first time. This could be termed “ethical safety” rather than regulatory safety.

At the center of ethical safety Sarpy County is attempting to provide a positive view of what is right and what is good. In the development of our training program, it is our intent to make an approach to safety that is worth pursuing in order to reach our goal of **zero incidents**.

It is our desire that each employee understands the meaning of ethical safety and the benefit for himself or herself, for his or her co-workers, and for the county.

The on-going safety training program developed by the County Safety Committee should encourage each employee to become an active participant, not only during training sessions, but also while on the job.

# Chapter 4

## Drug and Alcohol Use

### A. Prohibited on the Job

Sarpy County is a Drug Free Workplace and as such, alcoholic beverages and other non-prescription, mind-altering substances are prohibited on county property or while performing county functions. Sarpy County may require applicants, after being offered employment, to take a drug and/or alcohol test. Employees, at any time, may be subject to drug and alcohol testing, when the County has reasonable suspicion that an employee may be under the influence at work.

**NOTE:** Nothing in this chapter shall conflict with any drug or alcohol use County-wide policy. If there is a conflict between the two, the County-wide policy will govern.

# Chapter 5

## Reports and Investigation

### A. Incident Statements and Reports

In any incident involving county personnel or county equipment, an employee shall not make any statement regarding the incident, with the exception being to the following: investigating law enforcement; County Attorney; county management; NIRMA.

If you are contacted by any other party regarding the incident, including news media, refer them to the County Attorney or other designated spokesperson. It is also advisable for management, prior to making any statement to the news media or others, to consult with the County Attorney.

### B. Work-Related Injury or Illness

Every injury or illness occurring on the job to a county employee, regardless of how minor, must be reported to management and the county is responsible for reporting it to NIRMA. Reports must be made as soon as reasonably possible; if an employee is unable to report, the immediate supervisor will prepare preliminary documentation.

### C. Injury, Fatality or Property Damage

Every incident involving a personal injury, fatality, or property damage to a member of the public occurring on county property or roads and any accident involving a county vehicle or equipment must be reported to management and the county is responsible for reporting it to NIRMA.

### D. “Near Hit” or Other Hazardous Conditions or Acts

Anyone witnessing a “near hit” incident or having knowledge of a hazardous condition or unsafe act that could result in an injury or property damage should provide management with a written report of the circumstance of the situation. “Near hits,” oftentimes referred to as “near misses,” are situations where an injury or damage to property did not result from the incident or situation, but this was purely due to chance or luck. “Near hits” should not be ignored or forgotten. When a hazardous condition is discovered, it should be addressed for reduction or elimination through administrative, engineering or Personal Protective Equipment methods. When an unsafe act is observed, the employee committing the act must be advised of such either by a co-worker or management. Unsafe acts not only place the employee in harm’s way, but also endanger co-workers. A “Near hit” should be considered a free lesson in risk management and error prevention and should be utilized as such.

## **E. Investigation by Management and County Safety Committee**

All incidents mentioned above are to be reported by management to the County Safety Committee and are to be investigated by both management and the County Safety Committee. The goal of the investigation is to determine how to prevent a reoccurrence of a similar incident. An incident indicates a failure in the safety system and must be addressed. This failure could be, but is not limited to:

- Failure by an employee or non-employee to follow safety procedures.
- Lack of or inadequate written procedures.
- Lack of or inadequate training.
- Equipment failure.

# Chapter 6

## Emergency Plans

### A. Emergency Plans

Management has the responsibility to develop and implement written emergency plans addressing the major known emergencies that could arise in the workplace. This plan will provide evacuation procedures, response to a medical emergency, the handling of various forms of violence, (i.e., bomb threats, on-site verbal or non-verbal threats, physical attacks by individuals or weapons), hazardous materials spills or exposures, security, and providing for the continuity of business in the event of a disaster. Generally, the following emergencies are addressed:

- Fire.
- Medical Emergency.
- Weather – Tornado.
- Violence in the Workplace.
- Hazardous Materials Spills or Exposures.
- Domestic Violence.
- Terrorism.

Each office has a written emergency plan addressing the above. Information is found on the Sarpy County Intranet homepage, see Emergency.

### B. Fire

All employees will be offered training in the use of a fire extinguisher within the first year of employment and thereafter annual refresher courses. The County Safety Committee will arrange for this training.

Should you discover a fire, loudly announce to others its location, if known. If trained in the use of a fire extinguisher, decide to fight or flee. Remember, there is nothing more important at the site of the fire than your life or the lives of others.

#### 1. Fighting a Fire

- a. Use the “R-A-C-E” procedure:
  - **Rescue** – Immediately stop what you are doing and remove anyone in immediate danger from the fire to a safe area.
  - **Activate** – Activate the nearest fire alarm pull station (if applicable), call 911 to report the location and current extent of the fire and notify staff.
  - **Contain** – Close all doors and windows that you can safely reach to contain

- the fire. Close doors behind you as you evacuate.
- **Extinguish** – Attempt to extinguish the fire if it is safe to do so. Retrieve the nearest extinguisher and use the “P-A-S-S” procedure.
- b. With a fire extinguisher uses the “P-A-S-S” procedure:
  - **P**ull the pin.
  - **A**im the nozzle at the base of the fire.
  - **S**queeze the handle.
  - **S**weep the nozzle from side to side.

## 2. **Fleeing from a Fire**

- a. Announce loudly there is a fire and, if known, its location.
- b. Tell others in the immediate area to evacuate and activate the emergency notification process to alert all others on the premises to the danger.
- c. Evacuate using the nearest exterior exit; – do not go back for personal possessions or other county property.
- d. Call the emergency number **after** you have evacuated.
- e. Go to your department’s preassigned assembly point, which will be a minimum of 500 feet from the fire and out of harm’s way.

## C. **Medical Emergency**

Employees working in locations where medical services, or a hospital or clinic are not available within four (4) minutes following a medical emergency will be offered First Aid and Cardiopulmonary Resuscitation (CPR) training. This training is on a voluntary basis at the expense of the county.

If you provide emergency first aid or CPR, or other emergency care at the scene of an accident or other emergency gratuitously, neither you nor the county can be held liable for any civil damages. Neb. Rev. Stat. § 25-21,186, known as the Good Samaritan Law, addresses liability in such cases.

### **Response to a Medical Emergency:**

If you are present or are an early arrival at the scene of a serious accident, the following is suggested:

1. Remain calm and encourage others to do the same.
2. If a doctor, nurse or other person trained in first aid is present, offer your assistance.
3. Call 9-1-1 and provide what assistance you can until trained help arrives.

Generally, the following steps should be followed:

1. Do not move a victim unless necessary.
  - a. If blood or other body fluids containing blood are present, use personal protective equipment if available.



2. Call or delegate someone to call 911 or the local emergency number.
3. Check for responsiveness and normal breathing.
  - a. If the victim is unresponsive and not breathing – perform CPR.
    - i. Use a one-way breathing device if available.
4. Stop serious bleeding by applying pressure to the affected area.
5. Treat for shock, if needed.
6. Treat for poisoning, if indicated.
7. If conscious, reassure the victim that aid is on the way.
  - a. Never offer a diagnosis to the victim.
    - i. Do not tell a victim or others of a specific type of injury (a broken arm, internal injuries, etc.), this judgment should be made by a qualified medical professional.
  - b. If possible, do not allow onlookers to comment on the condition of the victim as they may cause further emotional trauma.
8. Make the victim as comfortable as possible while waiting for aid.
9. Stay at the scene until emergency personnel arrive and provide any requested assistance.
10. Discuss the accident or injuries only with responding and/or investigating law enforcement officials or other qualified authority. Give all information that relates to the accident.

When you call for emergency aid or when you send someone to call for aid, remember to provide as accurate a location as possible: road or highway number and the approximate distance and direction from a specific location; how many persons are injured; types of injuries; types of dangers, etc.

(**NOTE:** Depending on our location and the telephone system from which you are placing the call, you may need to dial “9” first to access an outbound line.)

## **D. First Aid Kits**

A first aid kit capable of meeting a minor emergency equal to the total number of employees either in each office, shop, or on each floor shall be located in a visible and easily accessible location. The location of the first aid kit will be made known to all employees. Stop the Bleed trauma kits are in Safe Rooms.

## **E. Weather**

Tornado: Being located in Tornado Alley, it is not unusual for our area to experience exposure to such storms. Employee safety is of primary importance, so follow these directions:

- When tornado sirens sound or an announcement is issued by another qualified source, take shelter in accordance with the county's emergency plan.
- Do not make phone calls as this could overload the phone system and cause a heightened dangerous condition.
- Remain in the shelter until you are advised to leave by the official in charge.

#### In the Field

- Leave your vehicle or equipment immediately.
- Take shelter in a strong and stable structure, if available.
- If no shelter is available, find a low depression, such as a ditch, and lie flat, face down with your arms covering your head.
- It is **not** recommended you take shelter under a viaduct or bridge.

Snowstorm Conditions: If you become stranded during a snowstorm, do not leave your vehicle. Turn your emergency flashers on and, if you have a cell phone or other communications equipment, contact a base station or the emergency center and tell them your (approximate) location. Only run your vehicle motor for five (5) minutes every 15 minutes. Make sure the exhaust system is not blocked by snow. Allow fresh air into your vehicle by slightly opening a window.

## F. Bloodborne Pathogens

Bloodborne pathogens are microorganisms that are present in human blood and can cause disease to humans. It is best to assume that any body fluids from an injured person contain such microorganisms and that protection, such as latex or hypo-allergic gloves and one-way breathing devices, is used prior to exposure. Any employee exposed to the body fluids of a person should advise their supervisor as soon as possible and seek medical attention.

Any employee who is stuck by a needle or other type of sharp object or whose eyes, nose, mouth or broken skin meets blood should:

- Immediately flush the exposed area with water and clean any wound with soap and water or a skin disinfectant if available.
- Seek medical attention; and,
- Report the incident to the department head or supervisor immediately.

The following county employees are deemed in high-risk situations for such an exposure and will be provided the opportunity to participate in the Hepatitis B vaccination program prior to an exposure:

- Law enforcement and staff: excluding those not in contact with offenders.
- Correctional personnel and staff: excluding those not in contact with offenders; and,
- Custodians; excluding those not in contact with debris or trash.

If an employee declines to participate in the program, the employee will be requested to sign a Declination of Hepatitis B Vaccination. At a later date, if the employee decides to participate, he or she need only to advise his or her department head.

All other employees, following a possible exposure, are to inform their department head or supervisor, who will direct them to a medical practitioner for an evaluation and vaccination.

## **G. Violence in the Workplace**

Violence in the workplace will not be tolerated. Each department head will conduct annual reviews with their employees, addressing how incidents of this nature are to be handled when such conduct occurs, whether by a member of the public, a co-worker, or by individuals doing business with the county. The County Safety Committee will make arrangements through Human Resources for regular training in this area.

Workplace violence is considered as the threat of violence against a county worker. It can occur at the workplace or off-site and can range from verbal abuse and threats to physical assaults and homicide.

Sarpy County takes a position of **zero tolerance** in the area of workplace violence, be it either against or by a county employee. The complete policy can be found in the Sarpy County Personnel Rules and Regulations.

## **H. Terrorism**

Each office and department have a written plan addressing bomb and other types of terroristic threats. Follow your written plan procedures.

### **I. Harassment.**

Please refer to the County-wide policy regarding harassment.

# Chapter 7

## General Safety

This chapter will touch briefly on the wide array of general safety issues that Sarpy County is faced with and the suggested means of addressing those issues. Later chapters in this manual will address in greater detail many of these issues.

### A. Be Observant of Surrounding Conditions

Whether in an office environment, in a shop or in the field, employees should take note of and be aware of existing conditions and use proper safety techniques.

1. Watch for objects that could cause you to lose your footing.
2. Use caution on wet or icy surfaces. Clean up spills.
3. If you see some debris or trash, take the time to pick it up and dispose of it.
4. Inspect your work area for hazards prior to beginning the job.
5. Use handrails when ascending or descending stairways.
6. Don't put your hands or feet into an area that you cannot see into.
7. Those operating chainsaws should wear protective chaps.
8. Use your lap and shoulder belts when operating a county vehicle.

### B. Use Personal Protective Equipment

The failure of employees to use Personal Protective Equipment (PPE) is a major factor in the frequency and severity of work-related injuries. Employees who could be exposed to a situation which might cause injury will be provided the necessary and appropriate PPE. Chapter 10 addresses the use of PPE in greater detail.

### C. Maintaining Clean Work Environments

Cluttered or unclean work areas can result in a slip, trip or fall injury. Each employee is responsible for maintaining a clean work area. General housekeeping is addressed in greater detail in Chapters 8 and 9.

### D. Lifting or Exerting Force

Improper lifting or the exertion of unnecessary force can eventually, if not immediately, lead to injury and employees should be trained in proper lifting techniques.

Sarpy County has a 50-pound load limit. Moving any load that exceeds 50 pounds requires the use of a second employee or other load lifting device.

Lifting is addressed in greater detail in Chapters 8 and 9.

### **E. Use of Ladders Versus Use of Non-Approved Objects**

The improper use or failure to use an approved ladder or step stool has resulted in serious injuries to employees. Chairs, boxes, counter tops and desktops are not to be used in place of an appropriate ladder or step stool. Ladder safety is addressed in greater detail in Chapter 12.

### **F. Report Defective Equipment and Safety Hazards**

The routine inspection of county property, including but not limited to vehicles, equipment, machinery, and tools and associated power cords, is the responsibility of the user or operator. Defective property poses a hazard to the user and must be reported to management and will be removed from service to be repaired or replaced.

If you as a Sarpy County employee become aware of a hazard that should be addressed or feel a specific type of safety training should be provided, contact a member of the County Safety Committee.

### **G. Work Habits**

One of the leading causes of musculoskeletal disorders (MSD), such as carpal tunnel syndrome, is poor work habits, such as improper body, arm and hand posture. Another cause of MSDs is cumulative trauma where an employee does the same repetitive motion for an extended period of time. These types of injuries can be reduced with proper training, workstation analysis, and ergonomic study of the environment a person works in. Work-related injuries associated with MSDs will be addressed with the same concern as any other work-related injury.

Further information on workplace ergonomics can be found in Chapter 8.

# Chapter 8

## Office Safety

### A. General

Hazards in an office environment are different from what may be found on a road building project. However, the hazards in offices can have the same serious consequences: an employee or member of the public suffering a serious injury. When an office hazard exists, it must be eliminated. If it cannot be eliminated, then consideration must be given to engineering or administrative controls to reduce the hazard.

County government is subject to various safety and health regulations and standards, including National Fire Protection Association (NFPA); American National Standards Institute (ANSI); and National Electric Safety Code (NESC) and Uniform Building Code (UBC).

Department heads are responsible for providing a safe and healthy work environment. In order to achieve this the following will assist in attaining a **zero-incident** goal:

- Conduct routine safety and health audits of the workplace.
- Hold regular safety meetings to discuss safety and health issues.
- Develop and implement written security procedures addressing those issues pertinent to your office, in addition to the Master Emergency Plan.

Also, employees shall comply with the following:

- Walk, do not run.
- When going down or up stairs, use the handrail.
- Do not carry loads weighing in excess of 50 pounds; get a co-worker to assist or a lifting-transporting device (e.g., cart).
- Spills must be cleaned up immediately.
- Desk and file drawers must be closed immediately after use.
- Any injury must be reported immediately to the department head.
- No materials are to be placed or stored in common walkways (aisles).
- Materials stored on top of file cabinets or shelves should be stable and not within 18 inches of a sprinkler head or light fixture.
- Large, heavy, or bulky materials are to be stored on the lower shelves.
- Infrequently used lighter materials are to be stored on the top shelves.
- Materials in file cabinets drawers are to be evenly distributed.
- When placing or retrieving materials at shoulder height or higher, use a ladder or step stool.
- Only approved step stools or Type II (commercial) or Type I (industrial) ladders should be used.

- When approaching blind corners use caution.
- Be attentive to footing, especially in inclement weather. This also applies when you enter a building as floors may be slippery.
- Footwear that gives full side, back and front support provides the best protection against ankle or toe injuries; non-slip soles offer the best protection against slipping.
- Athletic shoes and open-toed shoes may be permitted, but only in an office environment and at the discretion of management.
- When mixing chemicals, use a face shield or, at a minimum, safety goggles or glasses with side shields.

## **B. Ergonomics**

“Ergonomic” programs aim to reduce musculoskeletal disorders (MSD), often caused by repetitive motion. This is one of the largest occupational safety and health problems in all employee work environments and classifications.

### **1. Work Areas**

Work areas should be based on body dimensions using the following principles:

- Head height: allow for tallest worker and natural posture.
- Elbow height: adjust normal work surface to just below elbow height.
- Arm reach: allow for shortest co-worker when reaching up or out; allow for tallest worker when reaching down.
- Leg length: allow for long legs; provide chair adjustment or footrests for shorter legs.
- Body bulk: allow for largest sizes; remember to consider varying girth and clothing bulk.

The most favorable working height for handwork, while standing, is 2 to 4 inches below elbow level. On average, working heights of 35 to 39 inches are most convenient, depending on the height of the individual involved. These heights do not apply to computer workstations.

You should also allow for the nature of the work:

- For delicate work it is desirable to support the elbow.
- For standing work, if it involves much effort and makes use of the upper part of the body, such as mailing/file handling, the working surface should be lowered to 6 to 16 inches below elbow height.

Glare from the reflection on your video display terminal (VDT) screen makes it difficult to see the screen clearly. Glare can be caused by sunlight on your screen or by inside light, such as overhead and task lamps. Simple lighting adjustments can help minimize and reduce eyestrain headaches caused by glare.

- Position the screen so it is at right angle to the window producing the glare.
- Close shades, curtains or blinds, if necessary, as light changes during the day.
- Tilt the VDT screen down slightly to avoid overhead light from producing glare.
- Sit with ceiling lights at sides rather than directly overhead.
- If you use a task lamp, position it to aim the light at your document instead of your screen.
- To help improve your viewing comfort, you may also need to adjust your VDT contrast and brightness modes.
- Periodically clean your screen to maximize clarity. Font characters on the screen should be clear and stable.
- Consider attaching a glare shield to the VDT screen if you are unable to eliminate the glare by other means.

Proper VDT use, including proper posture and workstation adjustments with careful attention to muscle and eye fatigue, should help prevent musculoskeletal and visual problems.

## **2. Adjusting Your Chair and Workstation**

- Adjust lumbar (lower back) support by moving the backrest up or down to match the inward curve of your spine.
- Adjust the tilt of the backrest and/or seat to keep your body supported in an upright position.
- Adjust the seat height for adequate leg clearance under the workstation and keep the keyboard at approximately elbow level.
- Adjust your monitor so the top of the screen is at or just below eye level and has a viewing distance of between 18 and 24 inches.
- Use a document holder that places the documents at the same height as the monitor.

## **3. Proper Body Posture**

- Keep your head in line with your shoulders and hips.
- Keep elbows close to your body.
- Keep wrists in a neutral position; bent no more than 10 degrees up or down.
- A keyboard and padded wrist rest can be used to support the wrists in a neutral position.
- Keep your knees at the same level as your hips or slightly higher.
- Keep feet flat on the floor or supported by a footrest.
- Keep fingers in a relaxed position when working.
- Reassess your workstation periodically.



### C. File Cabinets

- Drawers are to be closed, except when in immediate use.
- Always load from the bottom up to prevent cabinets from tipping over; never have more than one drawer of the same file cabinet open at a time.
- Avoid overloading top drawers.
- Close drawers gently using the drawer handles to prevent pinching fingers.
- If a drawer is solidly stuck, contact those responsible for equipment maintenance.

### D. Material and Office Supply Storage

- Material and office supplies must be stored in appropriate areas set aside for this purpose.
- Only items which can be solidly stacked on top of cabinets are permitted.
- Store heavy or breakable items on lower shelves.
- Store frequently used items on the middle shelves and in front.

#### **Do not:**

- Overload cabinets or shelves.
- Store materials on top of modular furniture overheads or cabinets.
- Store materials above the level of your shoulder height without using a ladder or step stool.
- Place heavy objects on top of file cabinets greater than (five) 5 feet tall.
- Use storage boxes (cardboard boxes) as room dividers.
- Use walkways, hallways, stairwells, and landings for storage. Walkways and hallways should be maintained free of all obstructions or impediments for use in case of an emergency.

**NOTE:** If materials (e.g. office supplies or records) have to be stored in cardboard boxes, they should be stacked or racked in a manner designed to prevent them from tipping, falling, collapsing, rolling, or spreading.

### E. Cutting and Attaching Equipment

- Paper cutters will be equipped with safety bars. The blade spring tension is to be adjusted so the blade will not fall on its own weight. The blade will be stored in the down and locked in a closed position when not in use.
- Do not attempt to forcibly discharge jammed staplers with the paper rest open.
- Razor blades, E-XACTO® blades and other pointed objects are to be boxed and stored separately. Never reach blindly for such items.

## F. Office Furniture and Equipment

- All legs of a chair are to rest on the floor. Do not tilt back to the extent that a chair leg comes off the floor.
- Check chairs monthly for loose screws, defective welds and broken springs.
- A chair should comfortably support your lower back, should not brush against your inner calves, and should allow your feet to rest on the floor. If your chair is not adjustable, a pillow behind your back and/or a riser under your feet can help provide additional support – **Caution:** this could also become a tripping hazard.
- Do not stand on chairs, desks, counter tops, cartons, trash receptacles or bookcases.
- Stepladders, properly extended, or approved lockable stands will be used for extending one's reach.
- Desk drawers must not be left in an open position.
- Glass desktops or counter tops are to be free from cracks, sharp edges or corners, and chips or broken edges.
- Defective, broken, splintered or cracked surfaces of any office furniture should be reported to building maintenance personnel or other proper authority for immediate repair.
- If it becomes necessary for an employee to move office furniture or equipment, when the weight or size of the items exceeds your physical capabilities, additional personnel are to be used.
- Office furniture should be able to support the weight of the employee that regularly utilizes it.

### Securing Furniture and Equipment

In order to be prepared for emergencies, certain office furniture and equipment should be secured to walls or floors.

- File cabinets/storage cabinets five (5) feet high and taller are to be placed against permanent walls and secured to the wall. File cabinets/storage cabinets, shorter than five (5) feet need not be secured to walls or floors.
- If wall space is not available, file/storage cabinets over five (5) feet high but less than six (6) feet may be placed in open areas, placed back-to-back and secured to each other, or the floor.
- File cabinets/storage cabinets (6) feet or taller are to be placed against permanent walls and secured to the wall.
- If wall space is not available, file/storage cabinets six (6) feet or taller may be placed in open areas, provided they are placed back-to-back and secured to each other and the floor.

## G. Electrical Equipment and Cords

Office work areas are subject to the National Electric Safety Codes (NESC) in the State of Nebraska. The following represents some of the pertinent electrical safety standards:

- Electrical power cords for computers, printers, or other devices will not be placed on the floor unprotected or where they may create a tripping hazard. Such cords, if placed in areas where you walk, will be covered with a protective strip to prevent tripping.
- Only UL approved electrical cords will be used.
- Only qualified employees will repair defective electrical cords.
- All equipment should be grounded; ground adapters are not permitted.
- Electrical extension cords are permitted. However, they are not to be used as a long-term substitute for fixed wiring.
- New electrical outlets should be installed to eliminate the need to have an excess of appliances on a single circuit.
- Portable heaters are discouraged. If used, these heaters are to be equipped with an automatic shutoff and comply with other county policies. Please contact Facilities Management for a listing of approved portable heaters.

### Machine and General Office

- Office machines will be turned off and unplugged prior to being serviced or when adjustments are made to a mechanical or electrical enclosed portion. Only qualified personnel will service or make adjustments to office machines.
- Report to your supervisor electrical hazards, such as frayed or bare wires, overloaded outlets, or improperly grounded wires. Provide a report to those responsible for repair of this type of equipment.
- Wear gloves when using toner or other chemicals used in office machines.
- Turn equipment off prior to adding any flammable liquids.
- Document cover on photocopiers should be down during copying to avoid blinding.
- Rings, bracelets, neckties, long strands of hair, and other loose personal items could be hazardous around exposed moving parts of office equipment.
- The use of candles and any other combustible items is strictly prohibited in the workplace.

## H. Space Requirements

The minimum space requirements for aisles and hallways are based on the Nebraska State Fire Marshal, the Life Safety Code of the NFPA, and the construction standards contained in the UBC.

It is required there be unobstructed walking space between and around desks, chairs, bookcases, file cabinets, credenzas, other general office furniture or equipment, and wall partitions. The wall partitions may be portable or permanent.

## **I. Housekeeping**

All workplaces are to be kept in a clean and orderly manner. If any type of debris, pencil stubs, scraps of paper, or other items are seen on the floor, please pick it up. If because of the nature of the debris you are unable to remove it, contact the appropriate personnel to perform the clean-up duties. Do not allow personal items to become tripping hazards.

### **1. Hallways/Walkways/Common Work Areas**

Both the NFPA and UBC have established a 44-inch minimum width for routes of travel by persons with disabilities. The 44-inch standard applies to all types of hallways and walkways, e.g., used as exits to work areas or offices. Designated hallways and walkways may be wider than 44 inches but should have at least 44 inches of unobstructed walking space.

### **2. Stairways**

These areas are to be clear of tripping hazards and in good repair. Storage, even on a temporary basis, is not permitted. All stair tread surfaces should be slip-resistant. Stairways are to have handrails on at least one side.

### **3. Exit or Directional Signs**

Illuminated signing is to be provided at every exit door, at the intersection of corridors, at exit stairways or ramps, and at other locations as necessary to inform occupants of the means of exit. Exit signs will be maintained in a good working condition.

### **4. Emergency Lighting**

- All windowless exit routes below ground level will have emergency lighting.
- In buildings where the occupancy is 100 or more, above or below the level of exiting.
- In buildings two (2) or more stories in height, above the level of exiting.

### **5. Door Openings**

Doorways are to be kept clear. Doors marked “Fire Door, Do Not Block,” or other special notice are not to be changed or altered. Solid doors (without windows or where sight distance is limited) can present hazards because they can be approached from both sides at the same time. A warning is needed to address this hazard.

## **J. First Aid Kits**

A first aid kit capable of meeting a minor emergency equal to the total number of employees either in each office or on each floor shall be located in a visible and easily accessible location. The location of the first aid kit will be made known to all employees. Stop the Bleed kits can be found in Safe Rooms. See Emergency Preparedness plans on the Sarpy County Intranet homepage under Emergency.

#### **K. Indoor Air Quality**

The county strives to provide the best working environment possible. In the past when upgrading the heating and ventilation systems, we have worked to reduce indoor air pollutants and improve air quality. If you have any questions or concerns in this area, please advise your supervising county official.

# Chapter 9

## Shop Safety

### A. Lifting or Exerting Force

Improper lifting or the exertion of unnecessary force can eventually, if not immediately, lead to injury. Employees will be trained in proper lifting techniques.

1. Sarpy County has a 50-pound load limit. Moving any load that exceeds 50 pounds requires the use of a second employee or other load lifting device.
2. Bulky or other large items that hinder your view will be handled by two or more employees or a load lifting device.
3. The use of cheater bars or other such devices is prohibited.
4. Equipment, tools or materials being taken out of a pickup truck will be taken from the end-gate area after it has been lowered, not from the side.
5. Fifty-five-gallon drums or gas cylinders are to be handled with a drum cart or other approved material handling device.
6. Support belts may be used at the employee's discretion.

### B. Protective Eye Wear

Protective eye wear is a requirement for any employee or visitor entering one of our county shops. Visitors should be limited to access due to the liability issue should one of them be injured while work is in progress; if they cannot be limited in access, the entry should be posted with the caution: "Eye Protection Required Before Entering."

Appropriate eye and face protection, including but not limited to safety glasses, goggles and face shields, shall be worn where machines or operations present a hazard to the eyes or face from flying objects, glare, liquids or injurious radiation.

Eye and/or face protection is required for, but not limited to the following operations and equipment.

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| 1. Air Compressor                  | 7. Spraying                       |
| 2. Sandblasting                    | 8. Power drilling                 |
| 3. Wire brushing                   | 9. Tree and brush trimming        |
| 4. Abrasive grinding               | 10. Power brooming                |
| 5. Torch cutting                   | 11. Sawing and hammering          |
| 6. Welding and welding inspections | 12. Working around brush chippers |

If the need for eye protection is required, goggles, safety glasses and face shields shall be

furnished.

### **C. Machine Guarding**

- When seven (7) feet or closer to the floor, or on work platforms, all rotating gears, pulleys, fans and belts will be protected by a guard.
- Table saws must always have the safety guard in place.
- Grinders will have the tool rest set not greater than 1/8-inch from the wheel; the upper break-away guard will be set not greater than 1/4-inch from the wheel.
- All guards provided by the manufacturer are required to be in place.

### **D. Compressed Gas Cylinders**

- Valves will be shut off when not in use.
- When stored, cylinders will be capped, secured or restrained.
- Gases of different types will be stored with 25-foot separation or by a 2-hour firewall. Do not store cylinders exposed to direct sunlight. Empty cylinders or the area in which they are stored will identify that they are empty.
- Cylinders will not be stored near welding areas or live electrical circuits, or where they could be contaminated by oil or grease.

### **E. Welding and Burning Operations**

- Welding curtains will be used to protect others from harmful rays.
- All face shields, goggles, or other eye protection equipment used in welding and burning operations will be marked with the shade of the protective lens or shield. The shade used by the employee should be the minimum set by the American Welding Society.
- For welding or burning operations, respirator protection should be used when the safety data sheet (SDS) requires this personal protective equipment (PPE).
- For welding or burning operations the employee will, at a minimum, use the PPE, including safety toed footwear or metatarsal protection as required by the American Welding Society.
- Arc welding units will be turned off when not in use.
- Following a welding or burning operation and every 15 minutes for one hour following such operation, a fire check will be conducted to ensure there is no smoldering fire potential.

### **F. Battery Changing or Charging Operations**

- Eye or face protection will be used. “Eye Protection Required” signs shall be posted above battery charging stations.
- Follow the battery manufacturer’s suggested method for connecting and charging.
- Get assistance when lifting batteries weighing over 50 pounds.
- Batteries emit flammable hydrogen gas when charging. Keep away from open flames.

## **G. Safety Signing**

In shops and other work areas where operations cause fumes, debris, dust, waste or other particles which could cause a personal injury, safety signs will be posted advising of the danger and, if applicable, PPE will be used. “Eye Protection Required” signs shall be posted above grinders, drill press, tire repair stations and other similar equipment.

## **H. Use of Tobacco Products Indoors**

In shops and those work areas where combustible fumes could result in a fire or explosion due to ignition, no smoking of tobacco or other products is permitted.

## **I. Maintaining a Clean Working Environment**

- All service and parts rooms, shop areas, offices, passageways, restrooms, aisles and floors will be maintained in a clean, orderly and sanitary condition.
- Combustible trash containers (used for oily rags, wipes, etc.) will have a self-closing lid. Flammable trash containers (used for common debris) will have a lid. Trash is to be removed from the premises at the end of each day.
- Work clothing, coveralls and other such personal items are to be stored in metal lockers or removed from the premises at the end of the shift.
- In larger shops, common walkways will be marked with yellow paint.
- Parts, extension cords, acetylene/oxygen hoses, cables, tools, and other such items are not to be left haphazardly on the floor where they could become a tripping hazard.
- Spilled fluids will be immediately cleaned up.
- In inclement weather and in shops in which trucks, plows and other such equipment are stored, serviced and repaired, damp and wet floors could cause an electrical hazard. All interior and exterior electrical receptacles are to be Ground Fault Circuit Interrupter (GFCI) protected.
- Electrical cords and plugs with exposed wires will be removed from service and repaired or replaced.
- Any equipment or tool which has had the ground prong removed from the plug will be removed from service and repaired or replaced.
- A first aid kit capable of meeting a minor emergency equal to, or larger than, the



number of employees in the shop shall be located in a visible and easily accessible location. The location of the kit will be made known to all employees.

- Materials, such as lumber, pipe and blades, will be stored flat on the floor or ground and **not** leaned lengthwise against a wall or structure.
- All materials will be stored in a neat, orderly and stable manner.
- Pits, when not in use, will be guarded by a covering, chains, or other similar barriers.
- Open stairways will have a handrail, including top and mid rail, on each open side.
- Load limits will be posted on elevated levels used for storage or other functions.
- Upper elevations will have a toe board above common walkways, and a top and middle rail. The railing must be able to withstand 200 pounds of force.
- Stairways are not to be used for storage.
- Broken or cracked windows will be repaired.
- Portable fire extinguishers are to be within 75 feet of travel, along a common walkway, and properly signed for quick locating.
- Drench stations (full body) capable of a flow rate equal to 20 gallons per minute (GPM) for a minimum of 15 minutes, and eye-wash stations (capable of 15 minutes discharge) will be within 10 second's travel. Eye wash and drench stations must meet ANSI Z358.1. Standard showers **DO NOT** meet the standards for drench stations.

## **J. Employee-Owned Equipment or Tools**

Use of employee-owned equipment or tools in the performance of work for the county must receive department head or supervisory approval in advance. Employee-owned equipment or tools are to be maintained in a safe working condition and removed from the county premises if determined to be unsafe. Unless due to County negligence, the maintenance, repair, and/or replacement cost is at the employee's expense.

# Chapter 10

## Personal Protective Equipment (PPE)

### A. General Guidelines

This chapter provides information about specific items and categories of personal protective equipment (PPE) used to protect and shield employees from injury or illness. When applicable, employees will be provided with PPE to use whenever there is a possibility of exposure or injury.

#### The county will provide the following equipment:

- Hard hat.
- Disposable ear plugs and protective hearing earmuffs.
- Special use work gloves, aprons, arm protection, (i.e., chemical, welding) depending on the type of work.
- Regular, cotton/leather work gloves are the employee's personal responsibility.
- Traffic control safety vests; Class II for daytime, Class III for nighttime.
- Safety harness/lanyard.
- Dust mask/respirators.
- Chainsaw safety chaps.
- Specialty coveralls – for use around hot asphalt, chemicals, or other items deemed hazardous;
- Back supports/braces.
- Safety or Plano glasses with side shields.
- Clear face shields or of the proper tint required for specific operations such as welding, cutting and grinding.
- Goggles for persons with prescription glasses; and,
- Safety-toe work boots/shoes, **if approved by the county.**

The county will furnish additional items of personal protective equipment as necessary. Any questions should be directed to your supervisor.

### B. Employee Responsibilities

When the job requires PPE because of a specific exposure, employees will wear the required PPE. Specific jobs that may require the use of PPE include, but are not limited to:

- Bridge maintenance or construction.
- When working or assisting outside contractors who require their employees to wear

safety-toe shoes; **exempt:** inspectors or observers.

- When you are involved in a work activity where the exposure will be reduced using PPE.
- In any area where welding, grinding, drilling or other such work is done, eye protection is always required. Additional PPE may be required depending on the actual work activity of the employee.

Properly maintain your safety equipment.

- Report all defective PPE to your department head or immediate supervisor.

Only PPE conforming to recognized standards (American National Standards Institute, National Institute of Occupational Safety and Health, Mine Safety and Health Administration) will be selected and used. **DO NOT** substitute PPE or supply your own.

PPE is a temporary and last resort measure. If possible, correct hazards through design, engineering or process changes, administrative or other means.

When you are issued equipment for the first time or when new devices are introduced, your department head and/or vendor will provide training on how and why the equipment is to be used; periodic refresher training will also be provided.

## C. Protective Eye Wear

Employees are responsible for wearing eye protection during any work activity that may expose them to an eye injury. Eye protection includes safety glasses with side shields, goggles, and face shields. Face shields may be used in conjunction with safety glasses or goggles.

Employees will be provided with appropriate eye protection for the job they are performing. Safety Plano eye protection will be available for the use of authorized visitors.

When to wear protective eye wear:

- Near flying particles, chips or dust, splashing liquids (including bodily fluids), bright flashes, glare, and heat.
- While driving any motorized equipment that is not equipped with an enclosure or cab.

Eye protection should conform to ANSI/ISEA Z87.1-2015 or most recent edition.

Where protective eye wear is required, it should be posted:

### **Eye Protection Required Before Entering This Area**

Green tinted face shields should not be used for welding and cutting operations unless they have a tint of five or six and are approved for welding and cutting operations. Face shields, or at a

minimum safety eye wear, will be used when an employee is working with chemicals or performing battery-changing operations.

## **D. Respiratory Equipment Selection, Maintenance and Storage**

**Respirator:** A device (supplied air or filter type) worn by persons for protection against breathing harmful vapors, gases, dust, fumes or mist. Respirators are provided for you to use when personal protection is required to prevent exposure to respiratory hazards. All respiratory Protective equipment used shall meet the ANSI and Occupational Safety and Health Administration standards.

The supervising county official or department head will:

- Provide, with assistance from the vendor , training in respirator care and use.
- Approve the types of respirators to be used.
- Provide dust masks/respirators and accompanying sanitary storage facilities.

There are different types of respirators. Some of these include dust masks and air-purifying negative-pressure respirators. To determine the need for respiratory protection where a hazard may exist, the following factors are considered:

- Toxic or irritating characteristics of a contaminant.
- Physical state of contaminant (dust, mist, vapor or gas).
- Concentration of contaminant (determines if protection is needed or whether a filter or supplied air is required).
- Skin absorption of a contaminant (gloves and protective garb properly selected may provide adequate protection).
- Anticipated exposure time (exposure concentration and time determine respirator type and service life).
- Possible skin and eye irritation.
- Work location – escape distance to safe atmosphere.
- Possibility of oxygen deficient atmosphere (supplied air required).
- Identity of contaminants (more than one may be present requiring special filters).

## **E. Hearing Protection**

Noise level studies will be performed, and steps taken to reduce the hazard in loud environments. Hearing protection will be provided and will be used when required to protect you from noise and when engineering controls cannot reduce the noise to acceptable levels. Protection against the effects of noise exposure shall be immediately available in those instances where the sound level exceeds 85 decibels (dBA - decibel A-weighted measurements).

The **noise level** is an exposure to an 8-hour “Time Weighted Average” (TWA) of 85 dBA. Where controls are not feasible and the noise level exceeds 85 decibels (dBA), wear an approved form of hearing protection. Activities that require hearing protection include operating air tools, power chiseling and hammering.

When your work areas or specific job tasks have been designated as those requiring hearing protection, you must wear approved protective equipment. Personal audio headphones are not considered approved hearing protection. Your supervisor is responsible for identifying hearing protection needs, as well as providing training on the proper use of hearing protection equipment.

Disposable earplugs are the most common type of hearing protection and should be readily available. Hearing protection will be available for the use of authorized visitors. Hearing protective earmuffs are available for special situations and can be worn with plugs. Certain work areas or tasks may be designated as requiring additional protective measures. If you have questions about high noise levels in your work area, contact your supervisor.

Where hearing protection is required, it should be posted:

**Hearing Protection Required Before Entering This Area**

## **F. Head Protection**

It is your responsibility to wear the county-provided orange or yellow/green hard hat while working on or off the highway rights-of-way or in other situations when there is danger of head injury. You are responsible for wearing a hard hat during any work activity that may expose you to a head injury when working in tight places with limited head room or when working overhead, such as bridge repair or construction, cutting or trimming trees, installing or repairing traffic signal devices, and storm damage cleanup. Hard hats should be immediately available for use as work conditions change so protection is available. Additionally, extra hard hats will be available for the use of authorized visitors.

Where hard hat protection is required, it should be posted:

**Hard Hat Protection Required Before Entering This Area**

While working on the railroad rights-of-way, employees should wear orange or yellow/green hard hats or similar colored caps/hats.

Head protection provided by the county will conform to ANSI/ISEA Z89.1-2014 or most recent edition.

Specific activities exempt from hard hat requirements include: (1) in an office setting; (2)

mechanics working inside or under a vehicle, or under equipment canopies; and (3) when you or your passengers are inside a vehicle cab.

When a hard hat is not required, a baseball-style cap or full brim hat (personal purchase) may be worn.

## **G. Safety Vests**

Safety vests are to be worn in field work areas when employees are exposed to traffic and on construction projects that remain open to the traveling public.

A vest equipped with reflective material is the standard for county operations. The retro-reflective vest is designed to identify the wearer as a person and to provide visibility through the full range of body motions. Orange or yellow/green vests will be worn while working in any situation where high visibility is necessary. Minimum Class III safety vests shall be worn at night.

In wet weather, you may wear fluorescent rain gear when such is provided by the county.

## **H. Fall Protection**

Safety harnesses, lifelines and lanyards are required when working at heights of six (6) feet or more where you are not protected by standard guardrails or safety nets, or as required when working in confined spaces.

- You must wear an approved safety harness as the job requires.
- Safety belts are not to be used.
- You will be trained in donning, doffing and using safety harnesses.
- Harnesses are to be used with approved lanyard, which will be anchored on an approved anchor point.
- Equipment will be inspected prior to each use.
- If used in a fall, the equipment cannot be used again until inspected and approved for use.

ANSI Z359.1 covers fall protection issues from training and fall arrest systems to rescue operations. Additional information on anchorage points, horizontal lifelines and rope access are also addressed in this standard.

## **I. Footwear**

Safety-toe footwear is required for employees whose work conditions expose them to a potential foot injury due to falling or rolling objects, exposure to the piercing of a sole or electrical or chemical hazards. Such protection is required for, but not limited to, the following jobs:

- Road, yard, and building maintenance (temporary, part-time flaggers are exempt).

- Bridge, culvert or building construction or remodeling.
- Construction inspection.
- Restocking or warehouse operations.
- Sign-making operations.
- Equipment repair and service.
- Carpentry.

The county will issue special footwear when required, or metatarsal shoe guards when appropriate. The County Reimbursement Policy is attached to this manual.

If you are not directly involved in the physical work of the job, you are exempt from wearing safety-toe footwear.

## **J. Clothing and Gloves**

When using hazardous chemicals, specialized gloves offering protection against specific chemicals, a laboratory coat/coveralls and, at times a splash apron, may be required PPE; see the specific safety data sheet (SDS) for the chemical being handled.

Insulated gloves and arm sleeve covers are recommended when handling hot or cold materials. To reduce cut or abrasion injuries, use puncture or abrasion resistant gloves, arm sleeve covers, and at times an apron.

Special occupational exposures, such as welding, require special gloves. The department head will provide the specific type of special occupational gloves needed for the safety of the employee.

The following are general guidelines in using gloves:

- Metal mesh or cut resistant gloves should prevent cuts from broken glassware, knives or other sharp objects.
- Leather gloves should prevent blisters, calluses, and abrasions. These gloves also protect against rough surfaces, sparks, and moderate heat.
- Cotton or other fabric gloves should protect against dirt and dust, or to better grasp slippery objects.
- Rubber, neoprene, vinyl, or nitrile gloves should protect against chemicals.
- Workers who are sensitive to natural rubber latex should avoid direct contact with latex gloves and other rubber products.
- Gloves should fit properly and be in good condition.
- Avoid contamination. Don't allow your bare skin to touch contaminated gloves.
- The purchase, use and care of general use work gloves is the responsibility of the employee.

## **K. Special Personal Safety Equipment**

- Neck shades, which can be attached to your hard hats, can be made available on request.
- When operating chain saws, protective chaps will be provided and used.
- Disposable gloves and coveralls are supplied for special work duties, such as work around asbestos, bloodborne pathogens, asphaltic oil and other specialized work duties.

If toxic or hazardous substances contaminate the coveralls, they are to be kept separate from other clothing or personal equipment to prevent cross-contamination. Any questions regarding PPE should be directed to your immediate supervisor.

## **L. Inspection, Maintenance and Storage of PPE**

- Clean and disinfect as needed.
- Inspect before and after each use.
- Immediately repair or replace any PPE that fails inspection. Do not attempt to do more than recommend by the manufacturer.
- Store PPE as instructed and according to manufacturer's guidelines.



# Chapter 11

## Hand and Power Tool Safety

### A. General

Hand and power tools, even those which are relatively simple to operate, can and do pose a hazard and have the potential to cause serious injuries when improperly used or maintained. Special attention must always be given when using any hand or power tool in the course of your work.

### B. Use and Care

Employees **WILL:**

- Use only tools that are in good operating condition.
- Be sure the tool has come to a complete stop before laying it down.
- Set tool rests 1/8-inch from the grinder wheel.
- Protect eyes, face, head, toes and scalp with the proper PPE for the exposure present.
- Wear industrial-quality safety glasses or a safety shield. Safety glasses are to have the ANSI Z87.1 logo on them to ensure they are industrial quality.
- Place long hair in a cap or secure with a band to keep it from getting caught in tools.
- Use a respirator when required by the safety data sheet (SDS) or other indicators. When working in dusty conditions, use a filter-type respirator. Dust masks are also available.
- Avoid outside distractions when operating any tool.
- Keep the work area clean. Keep the floor free of scraps and oil.
- Work only at the operating speed of the tool.
- Use both hands to hold and guide material being sawed.
- Clamp or otherwise secure materials being drilled.
- Stand in a safe location. Position yourself to avoid being hit if the tool kicks back. Do not stand directly behind the equipment, stand slightly to the right or left.
- Remove nails, staples, and loose knots before sawing, drilling, etc.
- Protect the electrical cord. Keep the power cord out of the line of the cut.
- Clean power tools before putting them away.
- Keep guards in place. Safety guards cannot protect you if they are not in place and in proper working order.
- Know the machine. Read the operator's manual and learn the applications, limitations, and potential of each power tool before you begin to use it.
- Know the shutoff switch location(s). Remember where the switch is located so you can turn off the machine quickly.
- Use safe blades. Never use cracked or kinked saw blades. Keep saw blades sharp and properly set.
- Be provided proper ventilation.

Employees **WILL NOT**:

- By-pass or remove guards.
- Wear gloves when using a grinder.
- Wear loose-fitting clothes or jewelry that could get caught in moving parts.
- Wear clothing contaminated with flammable or combustible materials.
- Use “cheater bars.”
- Use a power tool before it has reached operating speed or while it is coming to a stop.
- Force a tool by applying too much pressure.
- Stop moving parts abruptly. Once a power tool has been turned off, allow it to coast to a stop.
- Force an object into moving parts to stop a machine.
- Use power cords to raise or lower a power tool from one elevation to another.
- Leave a machine running unattended. Make sure all moving parts have come to a complete stop before you leave the work area or before you make minor adjustments.
- Perform any other duty, function, and/or procedure contrary to instructions, directions, or policy.

# Chapter 12

## Ladder Safety

Portable ladders are one of the handiest, simplest tools we use. Because of their effectiveness, ladders are used by many different employees to perform many different tasks. Although ladders are not complicated, planning and care are still required for safe use.

### A. Ladder

### Hazards

Ladder accidents usually are caused by improper selection, care or use, not by manufacturing defects. Some of the more common hazards involving ladders are instability, electrical shock, and falls, which can be predicted and prevented.

### B. Accident Prevention

- Do not hand-carry heavy loads on a ladder.
- Keep your belt buckle or bellybutton inside the rails. Do not overreach; move the ladder.
- Non-skid feet or spurs should prevent a ladder from slipping on a hard, smooth surface.
- Do not stand on the ladder's top three rungs.
- A damaged side rail may cause one side of a ladder to give way.
- The base of an extension ladder should be spaced one (1) foot away for every four (4) feet the ladder reaches in height.
- Ladders used to reach a walking surface or roof are to extend at least three (3) feet beyond the walking surface or roof.
- Extension ladders need both locks holding to prevent overloading a rail.
- Stepladders are to be spread in the open position and securely locked.
- Never use a folding stepladder in an unfolded position.
- Electrical shock can occur with metal or wet wood ladders.
- When ladders are used in the area of a door swing, the door will be closed and locked.

### C. Ladder Selection

Portable ladders are designed as “one-worker” equipment with the proper strength to support the worker, as well as his tools and materials. Ladders are constructed under three general classes:

- Type I (industrial) – Heavy-duty with a load capacity not more than 250 pounds. For highway, custodian and other heavy-duty work.
- Type II (commercial) – Medium-duty with a load capacity not more than 225 pounds. For custodial light duty work (suited for painting and similar tasks, not electrical work). This type is to be used in administrative offices for reaching materials at higher levels. Safety

stools may also be used.

- Type III (household) – Light-duty with a load capacity not more than 200 pounds, which are not permitted in county government operations.

## **D. Ladder Maintenance**

- Wood ladders can be protected with a clear sealer varnish, shellac, linseed oil or wood preservative.
- Wood ladders are not to be painted as the paint can hide defects or cover use directions or warning labels.
- Before using a wood ladder check carefully for cracks, rot, splinters, broken rungs, loose joints and bolts, and hardware that may be in poor condition.
- Aluminum or steel ladders should be inspected for rough burrs and sharp edges before use. Inspect closely for loose joints and bolts, faulty welds and cracks.
- Make sure the hooks and locks on extension ladders are in good condition. Replace worn or frayed ropes on extension ladders at once.
- Fiberglass ladders may have a surface coat of lacquer. If it is scratched beyond normal wear, it should be lightly sanded before applying a coat of lacquer.

# Chapter 13

## Chemical Safety

### A. Handling, Mixing and Using Chemicals

All employees that may handle or are exposed to a hazardous material while on the job will be trained in:

- The Right to Know Act prior to their first exposure.
- Understanding a Safety Data Sheet (SDS); and,
- The use of Personal Protective Equipment (PPE) that may be required.

The department head will arrange for this training with the assistance of the County Safety Committee. Additionally, the department head will have SDS available for the review of employees who are in contact with all materials that contain warning labels with any or all of the following words: *Warning, Danger*.

### B. Hazardous Materials Use, Spills and Exposures

All hazardous chemical containers are to be labeled or marked appropriately. Chemicals transferred from labeled containers, and which are intended for immediate use, are also to be labeled.

Each department head will make a list of hazardous chemicals in the work area that includes:

- The chemical name, i.e., gasoline.
- Where a hazardous chemical product is used, i.e., Road Department.
- Where the SDSs are located, i.e., Highway Superintendent's office shelf above computer – marked SDS.
- Safety Data Sheet (SDS) manual is to have tabs indicating location of specific chemicals SDS location in the manual.

The department head will maintain the SDS for all hazardous chemicals used in the workplace, regardless of where purchased. Additionally:

- Copies of the SDS will be located at the main workplace (office or shop), outlying shops, and will be accessible to all affected employees.
- No hazardous material container will be accepted without an SDS and an identifying label.
- No container is to be accepted if it is damaged.
- Containers being delivered that are not properly labeled or that are damaged will be refused and returned to the supplier.

All county materials classified as hazardous, or the waste of such materials will be discarded in accordance with federal, state and local laws or regulations.

The county has a specific policy addressing handling of any hazardous material or waste spill caused by an on-site county-related incident. Your department head or supervisor will provide you with specific information as needed.

The county and its employees are not to become involved in a hazardous material incident not related to county government. An exception would be law enforcement and the emergency manager who may become involved due to their responsibilities to public safety.

### **C. Emergency Care**

Workplaces where hazardous chemicals are used will have a drench station (full body) capable of a flow rate equal to 20 gallons per minute (GPM) for a minimum of 15 minutes, (standard showers do not qualify), and eye-wash station (capable of 15 minutes continuous flushing) within 10 seconds of travel. Portable emergency eye-wash products are permissible, but only for the travel time to an eye-wash station as described above and within 15 seconds.

# Chapter 14

## Vehicles and Equipment

In this chapter the term “vehicle” refers to any motorized vehicle licensed for use on a public road. The term “equipment” refers to mobile machinery and other equipment used in county operations.

### A. Vehicle and Equipment Safety

The county has a Vehicle and Equipment Maintenance Program to ensure that County vehicles and equipment meet the minimum requirements of state and federal law.

County employees required to operate vehicles or equipment in the course of employment **WILL:**

1. Possess and have on their person a valid operator’s license for the specific class of vehicle being driven.
2. Operate vehicles and equipment in compliance with local traffic laws and the Nebraska Rules of the Road.
3. Check in both directions for oncoming trains when approaching a railroad crossing.
4. Always check what conditions exist behind the vehicle or equipment before backing up.
5. Try to generally park the vehicle or equipment in a manner where it should not be necessary to back up during the next start-up.
6. Park a vehicle or equipment in a manner to prevent roll-away accidents.
7. Ensure all equipment has, at minimum, amber strobe lights installed and use warning or precautionary lights when working or stopping on or adjacent to the roadway.
8. Use three-points of contact when entering and exiting equipment. **Do not jump off equipment.**
9. See that the vehicle or equipment being used is equipped with a working fire extinguisher, a first aid kit, and for field personnel a hard hat and a safety vest.
10. See that the vehicle has an accident form in the glove box, as well as the insurance card.
11. Report to their department head what medication they have been prescribed which contains warnings regarding drowsiness or other such conditions. If your physical alertness endangers yourself and others, do not operate a vehicle or equipment.
12. Maintain the vehicles and equipment in a clean condition.

County employees required to operate vehicles or equipment in the course of employment **WILL NOT:**

1. Back up on the reverse slope of a hill unless:  
A flagger is available to give guidance to both the operator and to on coming traffic

- a. The road is closed to traffic; or,
- b. Sight-distance is adequate and safe to back up for a short distance.
2. Park or stop the vehicle in a manner which would block traffic signs, signals or other traffic.
3. Stand next to the vehicle when parked in a maintenance or construction area, unless it is properly barricaded and signed.
4. Park or stop vehicles or equipment in the driving lane in which traffic is traveling, except in the performance of road maintenance duties and after other motorists are provided adequate warning.
5. Have two county vehicles stopped adjacent to each other blocking a road, except in the performance of their duty.
6. Sit on the deck or tailgate of a moving truck, ride in the bucket of a front-end loader, or on the forks of a fork-lift.
7. Be lifted in non-personnel lifting equipment, such as loader buckets, etc., unless equipment is approved OSHA personnel lifting equipment.

## **B. Driver Training Program**

All county employees required to operate a county vehicle or equipment **WILL:**

- Complete a driver's training course within the first six months of being hired, unless the employee can provide documentation that he or she has attended a driver training course within the previous 12-month period.
- Attend a refresher course at least once every three (3) years; and
- Be required to attend a refresher driving improvement course because of observed or otherwise noted driving deficiencies regarding compliance with the Nebraska Rules of the Road.

The department head or supervising county official will, with the assistance of the County Safety Committee, arrange for all driving courses.

## **C. Loss of Driving Privileges**

If a county employee:

- Has his or her driving privileges revoked, suspended or otherwise removed, either by a court order or any State Department of Motor Vehicles administrative order, the employee will provide a copy of the order to his or her department head or supervising county official within one working day of receipt.
- Possesses a CDL and is charged or pays a fine by waiver for a traffic violation (moving violations only) regardless of the vehicle he or she is driving at the time, the employee will notify his or her department head or supervising county official, in writing, within one working day of receiving the violation or paying a fine.
- Loses his or her driving privileges may call for disciplinary action as described in the



County Personnel Policies and Procedures Manual and/or County-wide policy.

Additionally, while the driving suspension is in force the employee will not operate any county vehicle and, if feasible, will not operate any county equipment on a public roadway.

#### **D. Driving Record Review**

1. Job applicants will furnish a current abstract of their driving record at the time of applying for a county position or within a reasonable time thereafter.
2. Non-Nebraska residents applying for a county position that requires operating a motor vehicle and whose driving record is not immediately available, may be conditionally hired if approved by the department head or supervising county official. The driving record is to be provided within 30 days of hire.
3. At least once every 12 months, the supervisor should review the driving records of all employees who may be required to operate a vehicle in the course of employment.
  - a. The supervisor should consider utilizing the state's DMV Driving Record monitoring service.

#### **E. Personal Restraint Systems**

It is Nebraska law, and the policy of Sarpy County, that employees and all passengers in their vehicle use seat belts and shoulder restraints. If the seat belt system does not fit, advise your department head or official and the system will be retrofitted to your size. If because of a medical condition, using the seat belt system is not recommended by your physician, a letter from the physician explaining the situation will be evaluated by management and a decision will be made on each individual case.

**Exemptions** from seat belt system usage include:

- When you and your passengers are engaged in stop-and-go work of 200 feet or less. If the distance is greater than 200 feet, restraints must be worn.
- Operating a motor grader, tractor, front-end loader, roller, etc., that does not have a rollover protection structure (ROPS).

#### **F. Commercial Driver's License**

##### **A. Requirements**

The duties of some county employees may include the responsibility of operating a vehicle classified as a commercial motor vehicle (CMV). Employees required to operate CMVs are required to possess a valid operator's license of the specific class required for the vehicle.

CDL operators are:

- Subject to pre-employment Department of Transportation (D.O.T) drug testing in addition to non-D.O.T. testing.
- Subject to D.O.T. drug and alcohol testing randomly, post-accident, and for reasonable suspicion.
- To be provided a copy of the CDL guidelines of the D.O.T. governing the federal and state requirements.



# Chapter 15

## Additional High-Risk Areas

### A. Railroad Rights-of-Way

There is an inherent danger when working on open roadways. This danger increases significantly when county employees work near, at, or on railroad rights-of-way.

- The department head is responsible for training employees who may be working within 25 feet of any railroad track. Employees will attend a railroad orientation class. Re-certification will be provided on an annual basis.
- Prior to working on railroad property, the department head will notify the railroad twenty-four (24) hours in advance.
- When working alone, be alert to rail traffic.
- When working with a crew of two or more, one employee is to act as a lookout and watch for approaching trains. This may be a railroad person or a county co-worker.
- All members working on the crew **should be in contact** with the lookout.
- When working on railroad property, employees will wear an orange or yellow/green vest with reflective material, a similar colored cap or hard hat, and gloves, safety boots, and safety glasses.
- If you foul the track notify your department head, who is responsible for notifying the railroad. Fouling the track means “the placement of an individual or an item of equipment in such proximity to a track that the individual or equipment could be struck by a moving train or on-track equipment, or in any case is within four feet of the field side of the near running rail.”
- Radios are only allowed to be used for communication purposes. No personal radios or tape/CD players, or other music/voice devices are permitted when working on railroad rights-of-way.
- No weapons are permitted on railroad property.

### B. Trenches and Excavations

Employees working in trenches or excavations greater than four (4) feet in depth will:

- Have a qualified person inspect the trench prior to each day’s work and following any rainstorm.
- Have a point of access or egress every 25 feet.
- Spoil piles– material which has been removed from the excavation area – not closer than two (2) feet from the edge.
- Be protected from cave-ins by sloping, stepping or shoring.

## **C. Heights Greater than Six (6) Feet**

Employees when working at heights greater than six (6) feet without any barriers, guardrails or other protection **WILL:**

- Be trained in the use and care of fall protection equipment.
- Use fall protection equipment.
- Not be raised to any height in the bucket or forks of equipment, unless in OSHA approved personnel lifting equipment and with an OSHA approved work platform with approved railing has been provided.
- Be alert to electrical overhead lines. Power lines should be shut down, if practical, prior to working in area.

## **D. Confined Spaces**

Prior to working in a confined space, employees are to be instructed in the hazards involved, the precautions to be taken, and the use of PPE and emergency equipment. A confined space means a space that: (1) is large enough and so configured that an employee can bodily enter and perform assigned work; (2) has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and (3) is not designed for continuous employee occupancy.

## **E. Lockout/Tagout Program**

The purpose of this program is to establish the minimum requirements and procedures for affixing appropriate lockout or tagout devices to energy isolating devices, and to otherwise disable machines or equipment to prevent unexpected energization, start-up, or release of stored energy in order to prevent injury to employees. All road department employees are covered by this program and must receive adequate training. All facilities where road department employees work is covered by this program including the Road Department Shops and any other county or other property where the road department employees may work.

This program applies to the control of energy during servicing and/or normal maintenance of machines or equipment if:

1. An employee is required to remove or bypass a guard or other safety device.
2. An employee is required to place any of his/her body into an area on a machine or piece of equipment where work is being performed at or upon the point of operation, or when an associated danger zone exists during a machine operating cycle.

This program does not apply to work on cord and plug connected electrical equipment when the employee performing the service/maintenance unplugs the equipment from the energy source and the plug is under his/her exclusive control. A cord lockbox shall be used if an employee is working on a plug connected piece of equipment and must leave the equipment prior to completing the service or repair.

## Sources of Energy and Stored Energy Requiring Lockout

1. Electrical: service panels, outlets, transformers, motors, capacitors
2. Mechanical: spring loaded equipment, tensioning devices
3. Hydraulic: rams, oil-powered equipment
4. Pneumatic: compressed air equipment
5. Kinetic/Gravity: counterweights, flywheels
6. Fluids/Steam: heating pipes, steam lines, boiler steam valves
7. Out-of-service vehicles and equipment
8. Mechanical equipment and tools
9. All hoist and overhead crane equipment
10. All machinery being repaired

Employees will be provided with appropriate lockout equipment including but not limited to: padlocks, lockout/tagout devices, lockout hasps, and circuit breaker lockouts.

Warning tags will be issued which must be used whenever a lockout device cannot be used.

Tags shall be substantial enough to prevent inadvertent or accidental removal. Lockout and tagout devices shall indicate the identity of the employee applying the device.

Lockout/tagout stations shall be located in each shop with sufficient lockout equipment and warning tags for that location

## **Sequence of Lockout**

1. The Highway Superintendent shall be designated as the person to exercise primary responsibility for the implementation and coordination of the lockout/tagout of hazardous energy sources for machines or equipment to be serviced or repaired.
2. The Highway Superintendent or designee shall notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform servicing or maintenance.
3. The employee performing the service or repairs must obtain approval to proceed from the Highway Superintendent or designee. Note: The Shop Foreman shall be considered the primary person for lockout/tagout procedures related to mobile equipment and may proceed with lockout/tagout measures without notifying the Highway Superintendent or designee.
4. The employee shall identify the type and magnitude of the energy that the machine or equipment utilizes, understand the hazards of each energy source and shall know the methods to control the energy.
5. When the electrical disconnect is attached (or adjacent) to the equipment, the motor stop button shall be depressed and the disconnect handle placed in the "OFF" position. The disconnect handle should be operated while standing to one side of the disconnect rather than in front of the switch. This is a safety precaution in case parts of the switch explode.
6. The employee should attach his/her lock to the handle of the disconnect and remove the key.
7. If a switch or disconnect cannot be locked out for any reason, the fuse(s) must be removed and the fuse box locked out before any work is started.
8. Stored or residual energy such as that in capacitors, springs, rotating flywheels and hydraulic

systems, and in air/gas, steam or water pressure lines must be dissipated or restrained by methods such as grounding, repositioning, blocking or venting. If there is a possibility of accumulation of stored energy, isolation must be verified continuously until servicing or maintenance is complete.

9. Equipment using hydraulic pressure shall be locked out by placing the hydraulic pump motor electrical disconnect switch in the "OFF" position, applying a lock to the disconnect and bleeding off residual pressure in the piping system if the energy could potentially endanger employees.
10. The employee shall ensure that the equipment is completely disconnected from all energy
11. source(s) by operating the push button or other normal operating controls or by otherwise testing to make certain the machine or equipment will not operate.
12. Return operating control(s) to neutral or "OFF" position after verifying the isolation of the equipment.
13. Equipment keys shall be removed and placed in the pocket of the individual performing maintenance on the equipment and performing the lockout or tagout on said equipment.
14. The machine is now locked out and service or repairs can safely begin.
15. If there are any doubts about the above procedure, the employee shall contact the Highway Superintendent or designee before proceeding.

### **Restoring Equipment to Service**

When servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken by the employee performing the service or repairs:

1. Visually inspect the machine or equipment and the immediate area around the machine or equipment to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
2. Visually inspect the work area to ensure that all employees have been safely positioned or removed from the area.
3. Verify the controls are in neutral.
4. Remove the lockout device(s) and re-energize the machine or equipment.
5. Notify the Highway Superintendent and the affected employees that the servicing or maintenance is completed and the machine or equipment is ready to use.

### **Procedure for more than one employee:**

In addition to the preceding steps, if more than one individual is working on the same equipment, ***all are required to lockout equipment.*** Each shall place his or her own personal lockout device on the energy isolating device or devices. When an energy isolating device cannot accept multiple locks or tags, a multiple lockout device shall be used. If lockout is used, a single lock may be used to lockout the machine or equipment with the key being placed in the lockout box or cabinet which allows the use of multiple locks to secure it. Each employee will then use his or her own lock to secure the box or cabinet. As each person no longer needs to maintain his or her lockout protection, that person will remove his or her lock from the box or cabinet.

### **Training & Inspection**

All employees will receive training in recognition of applicable energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control. All employees will also receive instruction in the purpose and use of the energy control procedure and procedures and prohibitions relating to attempts to restart or re-energize machines or equipment which are locked out. Training will be documented.

Employees will be retrained wherever there is a change in their job assignments that could affect their lockout responsibilities, a change in the machines or equipment that presents a hazard or when there is a change in energy control procedures.

The Highway Superintendent will conduct a comprehensive inspection of the energy control procedures at least annually to ensure that the facilities are in compliance with the OSHA Power Lockout/Tagout Standard and the procedures outlined in this program. The results of the annual inspection will be recorded with the training documents.

### **Contractors**

The requirements and procedures described in this program will be explained to contractors who come into the facilities to perform installation, service and/or maintenance work. Contractors must also inform the Highway Superintendent, or his/her representative, of their own lockout/tagout procedures.





HAZARDOUS ENERGY CONTROL

**LOCKOUT EQUIPMENT LISTING**

The following machines and equipment fall under the requirements of 29 CFR 1910.147, the Control of Hazardous Energy (Lockout/Tagout). For this reason appropriate lockout procedures must be performed each time servicing or maintenance is performed.

<b>EQUIPMENT/MACHINE IDENTIFICATION</b>	<b>LOCATION</b>	<b>DATE LISTED</b>

HAZARDOUS ENERGY CONTROL

**LOCKOUT PROGRAM INSPECTION**

DATE: \_\_\_\_\_

EQUIPMENT IDENTIFICATION:

INSPECTION:

AUTHORIZED EMPLOYEES (JOB TITLES)

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

PROCEDURES BEING FOLLOWED: Y / N

COMMENTS/DEFICIENCIES:

---



---



---



---



---

DEFICIENCY FOLLOW-UP: COMPLETED \_\_\_\_\_ N/A

DATE:

COMMENTS:

---



---



---

REVIEWED BY: \_\_\_\_\_ DATE:

---

DATE: \_\_\_\_\_

## Acknowledgment

This is to acknowledge that on \_\_\_\_\_, 20\_\_\_\_, I was issued the \_\_\_\_\_County Safety Manual. I understand it is my responsibility to comply with all county directives, including the safety procedures outlined in this manual, and that failure to comply will result in corrective action.

Print Name: \_\_\_\_\_

Signature: \_\_\_\_\_

County Department/Position: \_\_\_\_\_

Date: \_\_\_\_\_, 20 \_\_\_\_