


City of Hannibal Loss Prevention Policy

Adopted by Executive Safety Committee:


Angelica N. Zerbonia, MRCC, CMO – Executive Safety Officer

04.18.2019
Date

Approved by City Council: Resolution No. 2209-19


James R. Hark, Mayor

06.04.2019
Date

**CITY OF HANNIBAL
LOSS PREVENTION POLICY**

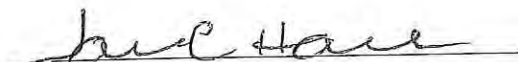
It is the intent of the City of Hannibal to implement a comprehensive loss prevention program. The City's employees are its most important asset and their safety is our greatest responsibility. The health and safety of all is our utmost consideration. Employees at all levels are directed to make safety a matter of continuing concern. This program emphasizes that effective loss prevention is a key part of management responsibilities and can only be effective by fully utilizing the City's available resources and enlisting the support of all personnel.

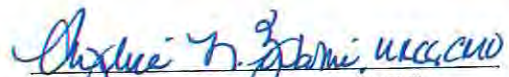
Operational activities must be reviewed to minimize exposure to personal injury and property damage. Planned operations should be reviewed to include consideration of errors which may occur. Accidents are unplanned events. Proper planning and supervision can minimize the likelihood of accidents. Accidents are preventable. The key to loss prevention is to initiate the necessary pre-planning to minimize unsafe acts, contain risks, and control unsafe conditions.

An accident is defined as an unplanned event which frequently results in injury or damage and interrupts the completion of an activity, and is invariably preceded by an unsafe act(s) and/or unsafe condition(s). Accidents are an unnecessary waste of both our human and economic resources. Though many accidents are due to unsafe conditions and can be minimized with periodic inspections and preventive maintenance, the majority of accidents are due to unsafe acts and human failure. It is the responsibility of the City of Hannibal and its employees to comply with safety and health standards and all rules which are applicable to his own actions and conduct.

Through emphasis on loss prevention techniques, refinement of work policies and procedures, and creating a safe working environment, we will reduce injuries to our employees and prevent damage to property. All employees are responsible for compliance with the City's Loss Prevention Program as outlined in the attached manual. Employees are expected, as a condition of their employment, to adopt the concept that the safe way to complete a task is the most efficient and the only acceptable way. Safety will be included as part of the performance evaluation of each and every City employee.

The successful implementation of this program rests with each one of us. Let's rise to the occasion and make our Loss Prevention Program a complete success. Let's make it part of our daily lives as employees of the City. I look forward to working with you in this very important effort.


James R. Hark
Mayor


Angelica N. Zerbonia – MRCC
City Clerk - Executive Safety Officer

GENERAL SAFETY RULES

Practical Jokes and Personal Conduct

- A. Employees shall not engage in practical jokes or "horseplay". This is considered inappropriate, libelous activity and shall not be tolerated under any circumstances. Disciplinary action may result.
- B. Each employee must comply with safety and health standards and all rules, regulations, and orders which are applicable to his or her own actions and conduct. Violations may be considered sufficient grounds for disciplinary action, including discharge.
- C. Employees shall perform their work in a safe and alert manner, and be aware of the possibility of unseen danger or situations. Employees are not expected to sacrifice their own or others safety to perform their duties.
- D. An employee shall avoid distracting the attention of another worker from his or her job until it is determined that no danger will result.
- E. A fellow employee should be cautiously warned, when seen in a dangerous situation, to avoid confusing, startling, or alarming them.
- F. Employees shall not use compressed air or other compressed gases for cleaning their clothing because of the dangers of flying particles and the possibility of forcing air through their pores into their bloodstream.
- G. Supervisors shall be responsive to their employees and aware of the job hazards.
- H. Modifying, displacing, removing or disconnecting any safety device is prohibited.
- I. Do not paint (or cover) over safety instructions.
- J. Personal firearms, ammunition, explosives, and other weapons of any kind are not allowed on the City of Hannibal property (with the exception of the Hannibal Police Department) as it pertains to their line of duty. Possession, display or use of these items may result in disciplinary action.

Equipment Safety Shields/Guards

- A. No shield/guard shall be removed from any machine or piece of equipment except to perform required maintenance.
- B. Should a guard/shield be found broken or missing, it is to be reported and then repaired/replaced immediately and/or the equipment must be tagged out of service until the correction is made.
- C. Guards removed to perform maintenance operations shall be replaced immediately and the machine shall not be operated while the guards are removed except for maintenance certification.

Housekeeping

- A. Good housekeeping shall be maintained in shops, yards, buildings, vehicles, and job sites. Supervisors shall be responsible for proper housekeeping in or around the work they are supervising.
- B. Walks, aisles, stairways, fire escapes, and other passageways shall be kept clear of obstructions and tripping hazards. Access to electrical panels, control bulbs, fire extinguishers, etc., shall be kept clear of obstructions.
- C. Tools and materials shall not be placed where they may cause tripping or stumbling hazards, or where they may fall and strike anyone.
- D. Tools shall be cleaned and returned to their proper place when job is completed.

- E. Puddles of oil, paint, water, etc., shall be cleaned up promptly. Absorbent material should be used as a cleanup aid when needed.
- F. Nails in boards, such as those removed from sheathing, scaffolds, forms, and packing boxes shall be removed and the boards carefully stacked or stored if they are to be reused. If such boards are to be added to a scrap pile for disposal, nails should be bent over or removed.
- G. Scrap containers, or scrap collection areas, shall be provided where needed and used for storage of wood and metal scraps.
- H. Scrap material of salvage value shall be properly stored until suitable arrangements are made.
- I. Combustible materials, such as oil-soaked rags, waste and shavings shall be kept in approved metal containers with metal lids. Containers shall be emptied as soon as practicable.
- J. Dispose of glass separately. Fluorescent tubes need special handling.
- K. Eliminate fly and insect attractions if possible, at least provide some control.
- L. Used rags shall be kept in metal or metal lined bins having metal covers.
- M. Flammable liquids shall be used only for their designed purposes. Gasoline, benzene, naphtha, lacquer thinner, etc., shall not be used for cleaning purposes or for starting or kindling fires.
- N. All solvents should be kept in approved, properly labeled containers. Gasoline, benzene, naphtha, lacquer thinner, and other solvents of this class shall be handled and dispensed only in U.L. approved, properly labeled (yellow letters), red safety cans.
- O. Permanent floors and platforms shall be kept free of dangerous projections or obstructions and shall be maintained reasonable free from oil grease, or water. Where the type of operation produces slippery conditions; mats, grates, cleats or other methods shall be used to reduce the hazard from slipping.
- P. Materials and supplies shall be stored in an orderly manner so as to prevent their falling or spreading and to eliminate tripping and stumbling hazards.
- Q. Paper and other combustible materials shall not be allowed to accumulate, and weeds or other range vegetation shall not be permitted to grow in or around the neighborhood of substations, pole yards, buildings, tanks or other structures.
- R. In any building, except one provided for their storage, flammable liquids such as gasoline, benzene, naphtha, lacquer thinner, etc. shall be limited to five gallons, in U.L. approved, properly labeled containers.
- S. Rule 112-s does not apply to kerosene and cleaning agents of the "Stoddard" solvent class; however, not more than one gallon of such liquids shall be kept in any open container. The container shall be provided with a proper cover and be kept securely covered except when in actual use.
- T. When pouring or pumping gasoline or other flammable liquids from one container to another, metallic contact shall be maintained between the pouring and receiving containers. Transferring of flammable liquids from one container to another shall be accomplished only in properly ventilated spaces free from ignition sources.
- U. Strict adherence shall be paid to "No Smoking" and "Stop Your Motor" signs at fuel dispensing locations.

Smoking

Smoking or open flames shall not be permitted in areas where dangerous gases might be present; for example, oxygen buildings, acetylene storage, or similar areas. Neither shall smoking be permitted in storerooms, battery rooms, flammable liquid storage and use locations, or in other areas where quantities of combustible materials are kept. Absence of "No Smoking" signs shall not excuse smoking in dangerous places. Smoking is not allowed in any City vehicle or equipment or any City of Hannibal building.

Fire Protection

- A. Good housekeeping is one of the most effective aids to fire prevention. Waste paper, rags and other combustible materials shall not be allowed to accumulate.
- B. Matches, cigars, cigarettes, pipe tobacco, and ashes shall be disposed of in ashtrays or other non-combustible containers. Ashtrays shall be emptied into metal trash containers. Smoking debris shall not be emptied into wastepaper baskets.
- C. The growth of weeds, tall grass, or other vegetation shall be controlled in or around structures, yards, buildings, tanks, or storage areas. A regular procedure shall be provided for the periodic cleanup of these areas.
- D. Grease and rubbish shall not be allowed to accumulate in elevator shafts and pits.
- E. When temporary, combustion-type heating devices, such as salamanders or LP heaters are used:
 - 1. Adequate fresh air shall be available. Where fresh air is inadequate, mechanical ventilation shall be provided.
 - 2. They shall not be set directly upon wooden floors or other combustible material unless the heater is specifically designed for that purpose.
 - 3. They shall be located at least 10 feet from the vicinity of combustible material such as tarpaulins, canvas, plastic film coverings, etc.
 - 4. They shall be set horizontally level, unless otherwise permitted by the manufacturer's markings, and shall be securely placed to prevent overturning and the spillage of fuel.
- F. Firefighting equipment shall not be used, tampered with or removed from designated locations for purposes other than firefighting or rescue operations.
- G. Fire doors shall be properly identified and maintained in good operating condition and checked periodically. Materials or equipment shall not be placed to obstruct the fire doors.
- H. Flame or excessive heat shall not be used near fire-detecting devices or automatic sprinkler heads in service. Proper clearance shall be maintained between the top level of equipment or stored material and sprinkler heads or fire detectors.
- I. Defective or inadequate electric wiring shall be immediately repaired, removed or replaced. Oversize fuses or oversize circuit breakers shall not be used. Fuse and circuit breaker boxes shall be kept closed except during maintenance or testing.
- J. Employees shall not smoke nor use matches or open flames (and prevent electric sparks) in areas where combustible gases may exist, until tests prove that combustible gases are not present. Such conditions may exist in confined spaces such as gas-filled electrical equipment, or in manholes, vaults, battery rooms, or transformer or oil circuit breaker tanks.
- K. Flammable liquids, such as gasoline, benzene, naphtha, and lacquer thinner shall be kept in approved safety cans identified by proper markings. The quantity shall be kept to a minimum except in approved areas. Flammable liquids shall be kept in closed

- containers when not actually in use. Where more than five (5) gallons of flammable or combustible liquids or five (5) pounds of flammable gas are being used, a fire extinguisher with a U.L. rating of not less than 10-B shall be provided within 50 feet.
- L. Flammable liquids such as gasoline, benzene, naphtha, and lacquer thinner shall not be used for cleaning purposes.
 - M. When pouring or pumping flammable liquids from one container to another, metallic contact shall be maintained or an electrical bonding jumper connected between the containers to minimize the possibility of static spark ignition.
 - N. Plant spray booths shall be used properly ventilated and adequate firefighting equipment shall be provided. "No smoking" signs shall be conspicuously posted.
 - O. Proper precautions shall be used in the presence of material in the form of dust or powder to prevent an explosion.
 - P. Employees shall be familiar with the location and proper use of fire extinguishers in their work area. Whenever a fire extinguisher is used, it shall be promptly replaced. The used fire extinguisher shall be recharged as soon as possible.
 - Q. Except for wheeled type equipment, all fire extinguishers shall be mounted. (Recommended height is 42 inches or less.)
 - R. Shall know the classes of fire, their burning characteristics and the proper extinguishing agent to be used.
(Class "A" fires involve normal combustibles such as wood and paper. Extinguishing agents include water, soda-acid and multipurpose dry chemical.)
(Class "B" fires involve oils and flammable liquids. Extinguishing agents include CO₂ and dry chemical.)
(Class "C" fires involve electrical equipment. Extinguishing agents include CO₂ and dry chemical.)
(Halon 1301 (Freon) and Halon 1211 are gaseous extinguishing agents suitable for combating both Class "B" and Class "C" fires, especially at indoor locations. Both agents are slightly toxic in low concentrations (less than 5 percent) and will cause unconsciousness in a short period of time when the concentration is above 15 percent. When the extinguishing agent is released, precautionary measures similar to those for toxic, confined spaces should be employed.)
 - S. Carbon tetrachloride fire extinguishers shall not be used; carbon tetrachloride is extremely toxic.
 - T. Employees shall be instructed in the proper use of fire extinguishing equipment and methods of extinguishing fires (including clothing fires).
 - U. Fire protection equipment shall not be blocked or hidden from view. In large rooms and in certain locations where visual obstruction cannot be completely avoided, signs shall be conspicuously posted to show the location of such equipment. Never use extinguisher as a coat rack.
 - V. Extinguishers shall be inspected monthly, or at more frequent intervals when circumstances require, to insure that they have not been actuated or tampered with, and to detect any obvious physical damage, corrosion, or other impairments.
 - W. Extinguishers shall have a durable tag securely attached to show the monthly maintenance date and the initials or signature of the person who performed this service.
 - X. Electric shock is possible if the person using CO₂ fire extinguishers on an electrical fire does not maintain a safe distance from the fire.
 - Y. The discharge horn of a CO₂ fire extinguisher becomes very cold during use. Do not touch it.

Z. When a CO₂ extinguisher is used in an unventilated space, the user can become unconscious because of oxygen deficiency. Employees shall not enter confined spaces after using CO₂ extinguishers until the area has been thoroughly ventilated.

Although dry chemical fire extinguishers are safe for the employee when used on electrical fires, if the powder becomes wet, a conducting solution is formed which could cause damage to electrical insulation.

1. Multi-purpose dry chemicals for Class A, B, and C fires shall not be mixed with dry chemicals intended for use on Class B and C fires only.
2. Ordinary Combustibles - Fires in paper, wood, drapes, and upholstery require an extinguisher labeled A.
3. Flammable Liquids - Fires in fuel, oil, gasoline, paint, and grease in a frying pan, solvents, and other flammable liquids require an extinguisher labeled B.
4. Electrical Equipment - Fires started in wiring, overheated fuse boxes, conductors, and other electrical sources require an extinguisher labeled C.
5. Metals - Certain metals such as magnesium and sodium require an extinguisher labeled D.
6. The purpose of fire protection systems is to protect life and property by automatically or manually suppressing fire. If not properly maintained, these systems may become worthless.
7. Keep only small quantities of flammables and combustibles on hand. Separate flammables and materials that react with each other.
8. Store flammables only in approved, correctly labeled, properly located and ventilated storage areas.
9. Post the location of the nearest fire alarm station, the proper fire reporting procedure, and the correct method of using all fire extinguishers in your work area.
10. Do not use soda-acid extinguishers on electrical fires.
11. Explosion proof motors, switches and lights are required in areas where explosive gases might be found.
12. Conduct drills and allow practice with each type of extinguisher. Install smoke detectors in personnel areas and check frequently (at least monthly).
13. Hydrostatic test interval varies with contents and type. Example: Dry chemical with stainless steel shell must be tested every 5 years while a dry chemical with mild steel shell allows a 12-year test interval.

Hand Tools

- A. All tools, regardless of ownership, shall be of an approved type and maintained in good condition. (Tools are subject to inspection at any time. A foreman has the authority and responsibility to condemn unserviceable tools, regardless of ownership.)
- B. Defective tools shall be tagged to prevent their use or they shall be removed from the job site.
- C. Employees shall always use the proper tool for the job performed. Makeshift and substitute tools shall only be used with proper authorization and under supervision.
- D. Hammers with metal handles, screwdrivers or knives with metal continuing through the handle and metallic measuring tapes shall not be used on or near energized electrical circuits or equipment.

- E. Tools shall not be thrown from place to place or from person to person; tools that must be raised or lowered from one elevation to another shall be placed in tool buckets or firmly attached to hand lines.
- F. Tools shall never be placed unsecured on elevated places.
- G. As impact tools such as chisels, punches, drift pins, etc. become mushroomed or cracked, they shall be dressed, repaired or replaced before further use.
- H. Chisels, drills, punches, ground rods and pipes shall be held with suitable holders or tongs (not with the hands) while being struck by another employee.
- I. Shims shall not be used to make a wrench fit.
- J. Wrenches with sprung or damaged jaws shall not be used.
- K. Pipe shall not be used to extend a wrench handle for added leverage unless the wrench was designed for such use.
- L. Tools shall be used only for the purposes for which they have been approved.
- M. Tools with sharp edges shall be stored and handled so that they will not cause injury or damage. They shall not be carried in pockets.
- N. Wooden handles that are loose, cracked or splintered shall be replaced. The handle shall not be taped or lashed with wire.
- O. All cutting tools such as saws, wood chisels, drawknives, or axes, shall be kept in suitable guards or in special compartments.
- P. Tools shall not be left lying around where they may cause a person to trip or stumble.
- Q. When working on or above open grating, a canvas or other suitable covering shall be used to cover the grating to prevent tools or parts from dropping to a lower level where others are present or the danger area shall be barricaded or guarded.
- R. The insulation on hand tools shall not be depended upon to protect users from shock.

Portable Electric Tools

- A. The non-current carrying metal parts of portable electric tools such as drills, saws and grinders shall be effectively grounded when connected to a power source unless:
 - 1. The tool is an approved double-insulated type, or
 - 2. The tool is connected to the power supply by means of an isolating transformer or other isolated power supply, such as a 24V DC system.
- B. All powered tools shall be examined prior to use to insure general serviceability and the presence of all applicable safety devices. The electric cord and electric components shall be given an especially thorough examination.
- C. Powered tools shall be used only within their capability and shall be operated in accordance with the instruction of the manufacturer.
- D. All tools shall be kept in good repair and shall be disconnected from the power source while repairs are being made.
- E. Electrical tools shall not be used where there is a hazard of flammable vapors, gases, or dusts.
- F. Tools connected to a central power supply (not isolated) and are not double insulated, shall be protected by a Ground Fault Interrupter (GFI) or by an "assured grounding system."

Pneumatic Tools

- A. Compressed air and compressed air tools shall be used with caution.
- B. Pneumatic tools shall never be pointed at another person.

- C. Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.
- D. Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.
- E. Compressed air shall not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment.
- F. Compressed air shall not be used to blow dust or dirt from clothing.
- G. The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.
- H. The use of hoses for hoisting or lowering tools shall not be permitted.
- I. All hoses exceeding 1/2 inch inside diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure or disengagement of a connection.
- J. Before making adjustments or changing air-tools, unless equipped with quick-change connectors, the air shall be shut off at the air supply valve ahead of the hose. The hose shall be bled at the tool before breaking the connection.
- K. Eye protection, foot protection and other protective devices shall be worn when their use could reduce the possibility of injury.
- L. Pneumatic tools shall be operated only by competent persons who have been trained in their use.
- M. The use of metal-reinforced hose shall be avoided near energized equipment. When this type of hose must be used, proper clearances shall be maintained.
- N. Jackhammer:
 1. Receive appropriate training:
 - a. Read the operator's instruction manual before using the jackhammer.
 - b. The Department Supervisor must certify, by documentation, that appropriate training has been provided.
 2. Always fill the compressor engine fuel tank out of doors with engine shut off and cool. Never handle fuel while smoking or in the presence of sparks or open flame. Allow the engine to cool briefly if you need to refuel during operation.
 3. Always wear protective equipment. Eye protection (safety glasses or shield), safety helmet, hearing protection, sturdy long pants, and foot protection are essential. Breathing protection may be used at the operator's discretion.
 4. Check all bits to see that they are sharp. If not, sharpen according to the manufacturer's recommendations.
 5. Always disconnect air supply before inserting or removing tools.
 6. Be sure all tools are properly locked into the unit before operating.
 7. Keep all bystanders, children, and pets out of the work area.
 8. Prevent back injuries by using your leg muscles to lift the machine into operating position.
 9. Allow the tool to do the work by using a grip light enough to maintain control.
 10. Take rest breaks as needed.
 11. If stopping work for a short period of time, or for the day, stop the compressor.

Power Lawn Mowers, Edger's, Etc.

- A. Employees shall insure that all applicable guards are in place prior to using power lawn mowers.
- B. All power lawn mowers shall be equipped with adequate guards, which shall remain in place while mower is in use.
- C. Prior to making adjustment, inspections or repairs, the employee shall turn off the mower and permit it to come to a complete stop.
- D. When operating a power mower, the operator shall:
 1. Remove any rocks, pieces of wire or other foreign objects from the area to be mowed.
 2. Avoid placing the body in front of the discharge opening.
 3. When mowing a slope or incline, mow across the face of the slope.
 4. Wear proper protective equipment to include as a minimum safety glasses or safety goggles. (Safety footwear should be worn.)

Safe Supports and Scaffolds

- A. No employee, or any material or equipment, shall be supported or permitted to be supported on any portion of a tree, pole structure, scaffold, ladder, walkway, or other elevated structure, crane or derrick, etc., without it first being determined that such support is adequately strong and properly secured in place.
- B. Employees shall check all scaffolding prior to use to insure it is of sufficient strength and rigidity to safely support the weight of persons and material to which it will be subjected.
- C. Employees shall not use a scaffold from 4 to 10 feet in height having a minimum horizontal dimension of less than 45 inches unless proper guardrails are present to provide employee protection.
- D. Employees shall not use a scaffold over 10 feet in height unless there is present a standard guardrail, with mid rail and toe board, to provide adequate employee protection.
- E. Scaffold planks shall extend over their end supports by not less than 6 inches (unless cleated) nor more than 12 inches.
- F. Scaffolds shall not be moved without first removing all loose tools, materials and equipment resting on the scaffold deck.
- G. All scaffolds shall rest on a suitable footing and shall stand level. Movable scaffolds shall have the casters or wheels locked to prevent movement.

Ladders-General

- A. Wooden ladders shall not be painted so as to obscure a defect in the wood; only a clear, non-conductive finish shall be used.
- B. All ladders shall be inspected frequently and regularly. Ladders with weakened, broken or missing steps, broken side rails, or other defects shall be tagged and removed from service.
- C. Ladders and scaffolds shall be sufficiently strong for their intended use.
- D. Portable metal ladders shall not be used in the vicinity of energized electrical circuits. (Exception: Such ladders may be used in specialized work, as high voltage substations, where non-conductive ladders might present a greater hazard. These ladders shall be properly marked.)

- E. Ladders shall not be placed in front of doors opening toward the ladder unless the door is open, locked or guarded.
- F. When ascending or descending ladders, employees shall have both hands free and shall face the ladder.
- G. Only one employee shall work from a ladder at one time (except for hook-type ladders). If two employees are required, a second ladder shall be used.
- H. Employees shall use only company-owned ladders.
- I. Ladders shall not be used as scaffold platforms.
- J. Boxes, chairs, etc. shall not be used as ladders.

Straight Ladders

- A. Portable straight ladders shall not be used without non-skid bases.
- B. The ladder shall be placed so that the distance between the bottom of the ladder and the supporting point is approximately one-fourth of the ladder length between supports.
- C. Straight ladders shall not be climbed beyond the third step from the top.
- D. When working from a portable ladder, the ladder must be securely placed, held, tied, or otherwise made secure to prevent slipping or falling.
- E. When dismounting from a ladder at an elevated position (as at a roof) the employee shall insure that the ladder side rails extend at least 3 feet above the dismount position, or that grab bars are present.
- F. Employees shall belt off to a ladder whenever both hands must be used for the job or there exists a possibility of the employee falling from an elevated position.
- G. Ladders shall not be spliced together to form a longer ladder.
- H. A ladder shall not be placed against an unsafe support.

Step Ladders

- A. The top step shall not be used, except for platform ladders.
- B. Stepladder legs shall be fully spread and the spreading bars locked in place.
- C. Stepladders shall not be used as straight ladders.
- D. When an employee is working on a step ladder over 10 feet high (except a platform ladder), the ladder shall be held by another person.

Material Handling - Lifting and Carrying

- A. Test the weight and handling carefully prior to attempting the lift.
- B. Consider the size, weight, and shape of the object to be carried. Do not lift more than can be handled comfortably. If necessary, get help.
- C. Set feet solidly, one foot can be slightly ahead of the other for increased effectiveness. Feet should be far enough apart to give good balance and stability (approximately the width of the shoulders).
- D. Get as close to the load as practicable. Bend legs about 90 degrees at the knees.
- E. Crouch, do not squat. It takes about twice as much effort to get up from a squat.
- F. Bend knees. Keep the back as straight as practicable. It may be far from being vertical, but it should not be arched. Bend at the hips, not from the middle of the back.
- G. Grip the object firmly. Maintain the grip while lifting and carrying. Before changing or adjusting this grip, set the object down again.
- H. Straighten the legs to lift the object, and at the same time bring the back to a vertical position. A good tip is to look up at the sky or ceiling when beginning the lift.

- I. Never carry a load that you cannot see over or around. Make sure the path of travel is clear. Carry the object close to the body.
- J. Never turn at the waist to change direction or to put an object down. Turn the whole body and crouch down to lower the object. Grip the object firmly, keep it close, and keep the back straight (not arched). To keep hands from being pinched against the floor, put one corner of a box or similar object down first, so that the fingers can be removed from under the sides.
- K. When lifting an object with another person, employees shall be sure that they both lift at the same time and let the load down together. One person should give the signals or orders.
- L. Improper lifting methods require unnecessary effort and often lead to injury. Ask for help when it is necessary to lift any object that is difficult to handle due to its weight, shape, or size.
- M. When carrying long objects each person shall be on the same side of the load.
- N. When two or more persons are carrying an object, each employee, if possible, should face the direction in which the object is being carried.

Compressed Gases

- A. Care shall be exercised in handling all compressed gas cylinders. They shall not be dropped, jarred or exposed to temperature extremes.
- B. Cylinders shall have the valve cap or valve protection device in place at all times, except when in actual use or connected to a welding set.
- C. Cylinders shall not be rolled and shall not be lifted by the valve or valve cap; a suitable cradle or other device shall be used.
- D. Cylinders shall have their contents properly identified.
- E. Compressed gas cylinders, whether full or empty, shall be stored in an upright position and chained or otherwise secured so they cannot fall or be upset.
- F. Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease) a minimum of 20 feet or by a 5-foot high non-combustible barrier.
- G. Cylinders shall not be placed where they might become part of an electric circuit or within five feet of an electrical outlet.
- H. Hydrogen and fuel gas cylinders shall not be stored inside any operating building. Separate storage buildings or sheltered storage areas shall be used.
- I. Employees shall never force connections, which do not fit, nor shall they tamper with the safety relief devices of cylinder valves.
- J. Before the regulator is removed from a cylinder, the valve shall be closed and all pressure released from the regulator.
- K. A leaking cylinder shall not be use. Such cylinders shall be taken outdoors away from sources of ignition. The supervisor shall be notified.
- L. A flame shall never be used to detect gas leaks.
- M. The recessed top of cylinders shall not be used as a place for tools.
- N. No attempt shall be made to mix gases in a cylinder or to transfer gas from one cylinder to another.
- O. A sign "Danger-No Smoking, Matches or Open Lights" or equivalent wording shall be conspicuously posted in rooms or at entrances to areas where fuel gas is used or stored.

- P. Hydrogen. Special precautions shall be taken when using hydrogen to avoid the possibility of fire and explosion. "Danger-No Smoking" signs shall be posted where hydrogen is used or stored.
- Q. Oxygen. Oil grease or similar materials shall not be allowed to come in contact with any valve, fitting, regulator or gauge of oxygen cylinders.
- R. Acetylene. Acetylene cylinders shall be properly secured and always be used, transported, or stored in a vertical position. Cylinders shall be protected from sparks, flames, and contact with energized electrical equipment.
- S. Chlorine
 - 1. Chlorine containers shall be stored and properly secured in a cool place protected from moisture.
 - 2. Every precaution shall be taken to prevent accidental discharge of the gas, and protective equipment shall be readily available for use in an emergency.
 - 3. Chlorine cylinders shall never be used or stored near flammable materials.
 - 4. Should a chlorine leak develop, the cylinder shall be placed so that only "gas" escapes. (An ammonia swab may be used to detect leaks.) Water should not be sprayed or poured on chlorine leaks.
 - 5. Dry chlorine shall be stored in an isolated area as mixing it with anything but water could cause a fire or explosion.

Gas Welding and Cutting

- A. Only experienced and properly trained persons shall perform welding and cutting. Before welding or cutting is started, the area shall be inspected for potential fire hazards.
- B. When welding or cutting in elevated positions, precautions shall be taken to prevent sparks or hot metal from falling onto people or flammable material below.
- C. Suitable fire extinguishing equipment shall be immediately available at all locations where welding and cutting equipment is used. Any employee using cutting torch equipment shall make sure tanks are turned off before leaving area.
- D. Welders or their helper when engaged in welding or cutting operations shall not carry matches or lighters.
- E. Matches or lighters shall not be used to light a torch; a torch shall not be lighted on hot work. A friction lighter or stationary pilot light shall be used.
- F. A fire watch shall be maintained wherever welding or cutting is performed in locations where combustibles present a fire hazard. A fire check shall be made of the area one half hour after completion of welding.
- G. Where combustible materials such as paper clippings or wood shavings are present, the floor shall be swept clean for a radius of 35 feet before welding. Combustible floors shall be kept wet or protected by fire-resistant shields. Where floors have been wet down, personnel operating arc-welding or cutting equipment shall be protected from possible shock.
- H. Approved back flow check valves shall be used on gas welding rigs in both gas and oxygen lines.
- I. Welding hose shall not be repaired with tape.
- J. Machinery, tanks, equipment, shafts, or pipes that could contain explosive or highly flammable materials shall be thoroughly cleaned and decontaminated prior to the application of heat.

- K. In dusty or gaseous spaces where there is a possibility of an explosion, welding or cutting equipment shall not be used until the space is adequately ventilated.
- L. Adequate ventilation or approved respiratory equipment shall be used while welding in confined spaces or while brazing, cutting or welding zinc, brass, bronze, stainless steel, or galvanized or lead coated material.
- M. Cadmium bearing materials.
 - 1. Proper respiratory protection must be used when welding or cutting cadmium bearing metals.
 - 2. Indoors or in confined spaces, local exhaust ventilation or airline respirators shall be used.
 - 3. Outdoors, respiratory protection such as approved fume respirators or airline respirators shall be used.

Electric Welding

- A. Only authorized persons who are experienced and properly instructed shall operate electric welding equipment.
- B. The electric welding machine shall be properly grounded prior to use.
- C. Suitable fire extinguishing equipment shall be readily available in the work area.
- D. Rules and instructions supplied by the manufacturer or affixed to the machine shall be followed.
- E. To protect his eyes, face and body during electrical welding and cutting the operator shall wear an approved helmet, proper protective gloves and clothing. Helpers or attendants shall wear proper eye protection. Other employees shall not observe electric welding operations unless they use approved eye protection.
- F. Proper eye protection shall be worn to guard against flying particles when the helmet is raised.
- G. Welding screens shall be used whenever other persons could be exposed to the arc of the welding operation. Welders shall not strike an arc with an electrode, whenever there are persons nearby who might be affected by the arc.
- H. When electrode holders are to be left unattended, the electrodes shall be removed and the holders shall be placed or protected so that they cannot make electrical contact with employees or conducting objects.
- I. When the welder must leave his work or stop work for any appreciable length of time, or when the welding machine is to be moved, the power switch or breaker to the equipment shall be shut off.

Electrical Protection

- A. Avoid working "Hot" circuits anytime.
- B. Only authorized personnel may perform maintenance or repairs on electrical equipment.
- C. Disconnect, lockout, and verify power stopped to any equipment before performing any repairs.
- D. Treat all wires as live. Report all loose or exposed wires to your supervisor.
- E. Electrical equipment grounding wires must not be broken or disconnected.
- F. Use a Ground Fault Circuit Interrupter (GFCI) where the grounding system cannot be relied upon.
- G. Extension and power cord must not have any breaks in insulation, plugs, or sockets.

- H. Obey all high voltage signs and keep the proper distance.
- I. Report any spills or leaks of transformer oil to your supervisor.
- J. Electric shock frequently causes serious injury, especially where the hazard of a ground and moisture are present. Do not attempt to repair electrical equipment unless you know for certain what you are doing and are authorized to do this type of work.
- K. Safety locks and tags must be placed on all electrical circuits or equipment whenever it is out of service for repair. Tags must indicate date of lock out and signature of person responsible for lock out. In some cases electrical equipment should be kept locked to all but qualified and authorized electrical workers. No excavation should be attempted in public right of ways without checking with proper agencies and location maps of all underground utilities.
- L. Personal protective equipment shall be worn, (i.e. ANSI approved hard hats, hard toed footwear, rubber gloves, etc.).
- M. When necessary to work (hot) energized circuits for testing, all safety precautions shall be taken.
- N. Approved gloves and hot sticks shall be used while working on 2300, or more, volt equipment, even though de-energized and grounded.
- O. Metal ladders are prohibited while working on electrical equipment.
- P. Electricians will not be allowed to work alone in isolated areas.
- Q. All circuits will be de-energized prior to performance of work.
- R. All extension cords will be periodically checked for insulation damage.
- S. Removal of tags and locks by anyone other than the employees placing the tags and locks on a piece of equipment will be subject to immediate dismissal, as serious injury could be caused to maintenance personnel working on tagged equipment.
- T. Switchboards/panels are not to be used as coat racks.
- U. Under certain conditions point three (.3) amperes can be fatal. Use caution even under low voltage currents.
- V. Automatic starting motors and pumps must carry a warning sign.
- W. Avoid "Christmas Trees" arrangements of double sockets, plugs, cords, etc.

Painting

- A. Employees using paints, lacquers, thinners, or solvents should avoid inhaling the vapors or getting these materials into their mouths, and should wash their hands carefully before eating.
- B. Employees wearing clothing contaminated with paint or thinner shall not use or go near open flames.
- C. Spraying areas in which dangerous quantities of flammable vapors, mists, combustible residues, dusts, or deposits are present shall be provided with adequate mechanical ventilation, which exhausts to a safe location. This ventilation shall be kept in operation while spraying operations are being conducted and for a sufficient time thereafter to allow vapors to be exhausted.
- D. Smoking, welding, open flames, or sparks shall not be permitted in areas where employees are spraying with a combustible or flammable material.
- E. "NO SMOKING" signs shall be conspicuously posted in spraying areas and on paint storage rooms.
- F. Approved portable safety lamps shall be used in paint spraying areas in which dangerous quantities of flammable vapors, mists, combustible residues, dusts, or deposits are present during spraying operations.

- G. Fire protection sprinklers for paint spray booths or spraying areas should be kept as free from deposits as practicable by cleaning daily, if necessary, or by covering the sprinkler head with a very light weight plastic bag that would not interfere with the proper operation of the sprinkler.
- H. Suitable portable fire extinguishers shall be installed near paint spraying areas.
- I. Employees using spray-painting equipment shall wear an approved mask or respirator and eye protective equipment.

COMMUNICABLE DISEASES

I. Policy Statement

The purpose of this policy is to provide guidelines for City of Hannibal employees in preventing the contraction of communicable diseases. This policy will be augmented by individual department policies which will further delineate procedures necessary to meet departmental responsibilities without sacrificing personal safety.

II. Policy

- A. The policy of the City is to safeguard employees, and the public, who may come in contact with the people who have, or are suspected of having, a communicable disease. Employees are responsible for treating people fairly and humanely. When handling or assisting persons with medical afflictions, employees must be sensitive towards the person's condition and treat the person with respect. Universal precautions must be observed whenever the possibility exists of coming into contact with anybody fluid. Information regarding an employee, arrest, or any person, with a communicable disease is confidential. Access to such information is limited to staff who has a legal need to know. Written consent of the individual must be obtained prior to release of information except as required by law. Each department will appoint an "Infection Control Officer", responsible for administration/implementation of this policy in the respective department.

III. Definitions

- A. Exposure: Any situation where the possibility exists that an individual or object may have been contaminated by bodily fluids of an individual suspected of having a communicable disease.
- B. Contamination: Physical contact with or transfer of body fluids from one individual suspected of having a communicable disease to another. The transfer of such body fluids to an item of equipment also constitutes exposure. These fluids may also be transmitted in the form of particles in the air as a result of a cough or sneeze.
- C. Body Fluids: Liquid secretions including blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, amniotic fluid, nasal secretions, sputum, saliva, sweat, tears, urine, feces, and vomitus.
- D. Communicable Disease: Those infectious diseases that are transmitted through contact with the body fluids of an infected individual. Infectious Disease: Same as communicable disease.

IV. Procedures

- A. Supplies Each City department must maintain a supply of protective equipment for the hazards likely to be encountered.
- B. Protective supplies will consist of, but are not limited to, the following items:

- a. Disposable latex gloves.
 - b. Protective face mask that covers the nose and mouth area.
 - c. Eye protection with vapor proof side shields.
 - d. Barrier resuscitation equipment.
 - e. Containers for disposal of needles and other "sharps".
 - f. Leather gloves for cleanup where puncture hazards exist.
 - g. Heavy duty clean up gloves for disinfection of contaminated equipment.
 - h. Scrub brushes for use in disinfection procedures.
 - i. Protective gowns for use during treatment or disinfection procedures.
 - j. Barrier tape for isolating contaminated areas.
 - k. Sealable plastic "Bio-Hazard" bags.
3. The Infection Control Officer of each department is responsible for assuring an adequate stock of supplies

B. Property Contamination

- 1. When City issued or personal property is contaminated by blood or bodily fluids, employees will disinfect the items in accordance with this policy.
 - a. Full protective equipment including protective equipment, protective eyewear, protective gloves, protective gown, and protective face mask must be worn for disinfection operations.
 - b. Contaminated equipment should be washed with a soap and water solution prior to disinfection to remove excess contamination.
 - c. Contaminated equipment must be disinfected with a 1:10 solution of bleach and water.
 - d. Fluids used during disinfection procedures will be disposed of in the sanitary sewer system.
 - e. Disinfected items will be washed thoroughly and wiped with disinfection solution and allowed to air dry before being returned to service.
 - f. Items that cannot be adequately disinfected will be sealed in a "Bio-Hazard" bag and delivered to the Infection Control Officer for disposal.
 - g. Contaminated clothing must be either spot cleaned with solution or sealed in a "Bio-Hazard" bag for disposal by the Infection Control Officer."
- 2. If it is determined that effective disinfection is not practical the employee will be notified by the Infection Control Officer, or immediate supervisor, to submit documentation for replacement of the articles.
 - a. Documentation must include the time, date, and incident at which the articles became contaminated.
- 3. A change of clothing will be made available for the employee if his personal clothing becomes contaminated.
 - a. In those departments where contamination is a daily hazard, employees are encouraged to keep a change of clothing in their work areas.

C. Vehicle Contamination

- 1. Disinfection procedures and equipment for vehicular decontamination is the same as those used for equipment disinfection.
 - a. Whenever possible the Infection Control Officer should oversee the disinfection of the vehicle.
 - b. Any excess contaminants should be disposed of in a sanitary sewer whenever possible.

- c. Clean up rags and excess contaminants must be placed in a sealed "Bio' Hazard" bag and disposed of in accordance with City Policy.
- d. Particular care should be taken when cleaning the seat, floor, or other areas where liquids may migrate.

D. Contamination of Individuals

- 1. A City accident report will be completed whenever an employee is contaminated, or has reason to believe he/she has been contaminated.
- 2. An "Exposure Report Form" must be completed by the employee detailing all information relative to the contamination situation.
- 3. The Infection Control Officer, or officer in command if the Infection Control Officer is not present, will direct the employee on what testing procedures will be conducted to verify/disprove contamination.
 - a. Testing to verify contamination will be conducted through Jefferson Memorial Hospital under the direction of the Occupational Medicine Program. This will be at the City's or its insurance carrier's expense.
- 4. Information received regarding exposure or possible exposure is confidential. It will not be disclosed to anyone other than the Department Head, Infection Control Officer, City Manager, Risk Management Coordinator, and the contaminated individual.

E. Infections Disease Training

- 1. City employee who face the possibility of occupational exposure to communicable diseases will receive appropriate training in their individual departments.
 - a. The Infection Control Officer is responsible for developing an ongoing training program to explain the hazards present and appropriate preventative measures.
 - b. The Infection Control Officer of each department will document training given and provide such documentation to the Risk Management Coordinator.

F. Immunization Program

- 1. In order to provide adequately for the safety of employees it is necessary to assure a minimum level of immunization protection for everyone.
- 2. Prior to employment, potential employees must comply with the following immunization requirements:
 - a. Complete pre-employment physical examination and drug testing with Occupational Medicine Specialty Center.
 - b. Tetanus vaccination and Tuberculosis testing may be administered at the time of the physical examine, unless documentation of current vaccination/testing is provided to and approved by the City.
 - c. If a TB skin test is deemed "positive", the potential employee will schedule a chest x-ray with their personal physician, at their expense.
 - I. If results are provided to the City stating that the chest x-ray is "negative", and the pre-employment physical examination and drug testing have been approved, the individual will be allowed to report to work.
 - II. If the chest x-ray is deemed "positive", the individual will not be allowed to work until approval is received from their personal physician. Individuals who need medication will be referred to the Jefferson County Health Center (JCHC) for Tuberculosis Case Management and receive medication at no charge.
 - III. After appropriate follow up is completed, employees who are identified to be positive reactors will be evaluated annually for signs and symptoms and

- complete the “Annual Statement for Tuberculin Reactors’ through JCHC or their private physician for the individual’s medical personnel file.
- d. Refusing to comply with this policy will result in ending the possibility of employment with the City.
3. All employees must comply with the minimum requirements of the City’s immunization program.
 - a. Required tests and vaccinations will be provided at City expense.
 - b. Employees may receive a Tetanus vaccination at least once every ten years.
 - c. Employees may receive a Tuberculosis test every five years, unless they have previously tested positive.
 - d. Employees who have a “positive” TB skin test will be referred to their private physician for chest x-ray and evaluation for medication, at their expense.
 - I. Employees who need medication will be referred to the medical provider for Tuberculosis Case Management and receive medication at no charge.
 - II. If the chest x-ray is deemed “positive”, the individual will not be allowed to return to work until approval is received from their personal physician.
 - III. If the chest x-ray is “negative” the individual will be allowed to return to work.
 - IV. After appropriate follow up is completed, employees who are identified to be positive reactors will be evaluated annually for signs and symptoms and complete the “Annual Statement for Tuberculin Reactors’ through the City Occupational Medicine provider or their private physician for the individual’s Medical personnel file.
 - e. If the event of exposure to an infectious TB case, the employee will be tested as soon as possible. If negative tuberculin testing will be repeated in three months.
 - f. Refusing to comply with this policy may result in the termination of Employment.
 4. Personnel having a risk of occupational exposure to Hepatitis B may receive the Hepatitis B vaccinations.
 - a. Vaccinations will be coordinated by the Infection Control Officer of each department and with the Risk Management Coordinator.
 - b. Vaccinations will be provided at no cost to the employee.
 - c. Employees not wishing to receive the Hepatitis B vaccine, for whatever reason, must complete the City waiver form for Hepatitis B vaccinations.
 - d. Employees declining Hepatitis B vaccinations may receive it at a later date, if they still have the possibility for occupational exposure, should they change their mind.
 5. Personnel having a risk of occupational exposure to Hepatitis A may receive the Hepatitis A vaccinations.
 - a. Vaccinations will be coordinated by the Infection Control Officer of each department and with the Risk Management Coordinator.
 - b. Vaccinations will be provided at no cost to the employee.
 - c. Employees not wishing to receive the Hepatitis A vaccine, for whatever reason, must complete the City waiver form for Hepatitis A vaccinations.

- d. Employees declining Hepatitis A vaccinations may receive it at a later date, if they still have the possibility for occupational exposure, should they change their mind.

**City of Hannibal
EXPOSURE REPORT FORM**

EXPOSED EMPLOYEE INFORMATION

Name: _____ Home Phone: _____

Social Security Number: _____

Address: _____

City: _____ Zip Code: _____

City Department: _____ Job Title: _____

INCIDENT INFORMATION

Incident Number: _____ Date: _____

Incident Type: _____

EXPOSURE DESCRIPTION

Exposure Date: _____ Exposure Time: _____

1. What body fluids were you in contact with?

Blood: _____ Feces: _____ Saliva: _____ Sputum: _____

Sweat: _____ Tears: _____ Urine: _____ Vomitus: _____

Other (describe): _____

2. What was the method of contact:

____ Needle stick with contaminated needle.

____ Blood or body fluids into natural body opening (e.g., nose, mouth, eye).

____ Blood or body fluids into cut, wound, sores, or rashes less than 24 hours old.

____ Please specify: _____

____ Blood or body fluids on intact skin.

____ Other (describe specifically): _____

3. How did the exposure occur? Be specific: _____

4. What action was taken in response to the exposure to remove the contamination (e.g. hand washing)?

5. What personal protective equipment was being used at the time of exposure?

6. Please describe any other information related to the incident. Use a separate piece of paper if needed:

SOURCE OF EXPOSURE

Name of Person (source of exposure): _____

Sex: _____ Receiving Health Care Facility: _____

Transported by: _____

Persons Physician: _____

MEDICAL INFORMATION

1. Did you seek medical attention? _____ Date: _____

If yes, where? _____

2. Did you contact Infection Control Officer? _____

If yes, give date and time: _____

Name of Infection Control Officer: _____

EMPLOYEE SIGNATURE

DATE

INFECTION CONTROL OFFICER'S SIGNATURE

DATE

COMMUNICABLE DISEASE FOLLOW-UP NEEDED? YES _____ NO _____

**CITY OF HANNIBAL
INFORMED REFUSAL FORM
FOR HEPATITIS B VACCINE**

Name (please print) _____

I understand that due to my occupational exposure to blood or other potentially infectious materials, I may be at risk of acquiring Hepatitis B (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B Vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B Vaccine, I can receive the vaccination series at no charge to myself.

Employee Signature

Date

Supervisor's Signature

Date

**CITY OF HANNIBAL
INFORMED REFUSAL FORM
FOR HEPATITIS A VACCINE**

Name (please print): _____

I have been given the opportunity to be vaccinated with Hepatitis A Vaccine, at no charge to myself. However, I decline Hepatitis A vaccination at this time. If, in the future, I want to be vaccinated with Hepatitis A Vaccine, I can receive the vaccination series at no charge to myself.

Employee Signature

Date

Supervisor's Signature

Date

CONFINED SPACE ENTRY

I. Purpose and Policy

The purpose of this program is to establish procedures to protect City of Hannibal employees from the hazards of entry into permit-required confined spaces. Under this program, the respective department will determine which spaces, will inform its employees of the existence and location of and the danger posed by such permit spaces, and establish, implement and publish a written Permit Space Entry Program which complies with the requirements of 29 CFR 1910.146.

II. Definitions

Acceptable Safe Level: means the atmosphere has at least 19.5% oxygen, is less than 10% of the lower explosive limit (LEL), and is below 10 PPM hydrogen sulfide (H₂S).

Atmosphere means the gases, vapors, mists, fumes and dusts within a confined space.

Attendant (is not part of the rescue team; unless he/she is an observer) means a trained individual outside the permit entry confined space who acts as an observer of the authorized entrants within the permit entry confined space keeping in continuous, though not necessarily constant, communications with them, so the attendant can immediately call rescue services if needed.

Authorized entrant means an employee who is trained and authorized by the employer or the employer's designate to enter a permit entry confined space. They must know the hazards they may face, be able to recognize signs or symptoms of exposure, and understand the consequences of exposure.

Confined space is any space which by design has limited opening for entry and exist; unfavorable natural ventilation which could contain or produce dangerous air contaminants, and which is not intended for continuous employee occupancy. The term "confined space" applied at all City facilities would include, but is not limited to:

* Storm Sewers	*	Boilers
* Sanitary Sewers	*	Containerized Welding
* Water Storage Vessels	*	Lift Stations
* Meter Vaults	*	Air Handlers
* Tunnels	*	Small Equipment Rooms
* Manholes	*	Tanks
* Trenches		

Entry means the action by which a person passes through an opening into a permit-required confined space, and includes ensuing work activities in that space. It is considered to have occurred as soon as any part of the entrant's body breaks the plane of the opening into the space.

Entry permit means the written or printed document provided by the City to allow and control entry into a permit space. The content of each permit is based on the City's identification and evaluation of each hazard of that permit space, or class of spaces, and all procedures the City requires for protecting entrants from those hazards during entry. Each permit contains the information specified in paragraph (f) ("Entry Permit") of this standard.

Entry permit system means the employer's system for assuring safe employee entry into and work within permit entry confined spaces. (In accordance with CFR 1910.146.)

Hazardous atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), serious injury or acute illness.

Hot work permit means the employer's written authorization to perform operations such as riveting, welding, cutting or burning, or heating that could provide a source of ignition.

Hydrogen sulfide (H₂S) is a major toxic of interest in confined space entry for sewer workers also known as "Sour Gas".

Lower Explosive Limit (LEL) is the minimum concentration of a combustible gas or vapor in air which will ignite if an ignition source is present. LEL is based on methane.

Oxygen deficient atmosphere means an atmosphere containing less than 19.5 percent oxygen by volume.

Oxygen enriched atmosphere means an atmosphere containing more than 23.5 percent oxygen by volume.

Permit-required Confined Space is any space which is large enough and so configured that an employee can bodily enter and perform assigned work, has limited or restricted means for entry and exist, is not designed for continuous employee occupancy, and has one or more of the following characteristics:

- A. Contains or has the potential to contain a hazardous atmosphere;
- B. Contains a material with a potential for engulfing and entrant;
- C. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section; or
- D. Contains any other recognized serious safety or health hazard.

Rescue team means a group of two or more people designated and trained to perform rescues from permit entry confined spaces in their workplace.

Retrieval line means a line or rope secured at one end to a worker's chest-waist or full-body harness, or wrestles, with the other end secured to a lifting or other retrieval device, or to an anchor point located outside the entry portal to prevent it from falling or being drawn into the space.

III. City of Hannibal Policy

A permit-required confined space may not be entered until the following is completed:

- A. Confined space entry training has been completed and documented for all personnel involved and the personnel who have completed it.
- B. A NEED for entering the space has been determined.
- C. Pre-briefing before entering space has been conducted.
- D. Confined space entry permit has been determined.
- E. A trained rescue team is available, or on site.
- F. All appropriate protective equipment is used.
- G. All safety and air quality testing equipment is at the job site and functional.

- H. If any of the above items are not met, "THEN ENTRY INTO THE CONFINED SPACE IS PROHIBITED". Employees not following these requirements will be dealt with according to the policy manual.
- I. Entry into a non-permitted confined space will be allowed only if there are no non-atmospheric hazards present.
- J. Make available any applicable material safety data sheets (M.S.D.S.) and attach to the permit should rescue or medical personnel treating an injured entrant need to review them.

IV. Procedures for Entry -- Permit-Required Space

A. Isolation of the Permit-Required Confined Space

All energy sources to the confined space shall be locked out and controlled. The purpose of this procedure is to ensure that employees are protected from unintended machine motion or release of an energy source when working in a confined space. Install barriers around the opening as necessary to prevent an accidental fall-through and to protect entrants from external hazards.

Provide an attendant outside the permit space for the duration of entry operations to prevent unauthorized entry.

B. Equipment Mobilization

1. Obtain and use all ventilation equipment needed to comply with Paragraph D and air monitoring equipment needed to comply with Paragraph E.
2. Evaluate permit space conditions and perform pre-entry testing to the extent feasible before entry is accomplished.
3. Review procedures for summoning rescue and emergency services, for rescuing entrants, for providing necessary emergency services to rescue employees, and for preventing unauthorized persons from attempting a rescue.
4. The requirements for harness, lifelines, breathing air, tripods, rescue winch, and protective clothing shall be documented on the permit.
 - a. A safety harness shall be worn by all persons entering a confined space that would require a vertical lift to make a rescue. Backup lifelines shall also be attached to individuals to effect a rescue. A tripod, hoist, and retrieval winch shall be utilized.
 - b. Reliable breathing air (self-contained) shall be worn in contaminated or dusty environments, where toxic concentrations are outside the set limits or where ambient conditions are subject to change, or where oxygen concentrations may drop below 19.5 percent. In IMMEDIATELY DANGEROUS TO LIFE ENVIRONMENTS (IDLH's) breathing air shall be provided.
 - c. Supervisory personnel shall be present in situations which require the use of a SCBA.
 - d. Special protective clothing shall be consistent with the potential exposure and be specified on the confined space entry permit.

C. Ventilation

1. Proper ventilation is used to provide a positive fresh air supply to the confined space as necessary to eliminate or control atmospheric hazards prior to entry and continuously during entry.
2. The open end of the supply duct(s) should be positioned to approximately 2 feet above the floor of the confined space.
3. Ventilation equipment should be explosion proof.

4. The blower unit must be at least 10 feet from the opening of the confined space.
5. All rooms with forced air ventilation, shall be ventilated 5 minutes before entering or the designated time printed on the entrance cover.

D. Atmospheric (Air) Monitoring

Testing the air in a confined space prior to entering the space is required. Entering a confined space prior to utilizing the proper equipment to ensure the air is safe to breathe is prohibited. Before an employee enters this space, the internal atmosphere should be tested, with a calibrated direct-reading instrument.

Prior to the initial entry, after each interruption and during the entire job sequence testing shall be done for oxygen content, combustible gases, and toxic gases, in this order.

1. Monitoring shall be continuous while working in the confined space and until the last entrant leaves the permit space. Employees shall be made aware that confined space incidents that result in fatalities should be preventable since 95% of them are due to just five kinds of atmospheric hazards, which are:
 - * Carbon Monoxide
 - * Carbon Dioxide
 - * Hydrogen Sulfide
 - * Flammable Gases
 - * Oxygen Deficiency
2. The air monitoring will be conducted by a trained and qualified person.
3. The first air measurement shall be made outside the confined space, near the opening.
4. A second air measurement shall be made directly at the opening to the space.
5. All subsequent measurements shall be made throughout the space with a probe or a remote sensor unit.
6. Air monitoring sequence shall be as follows:
 - a. Oxygen tests must always be made first because most combustible gas meters are oxygen-dependent. Too little oxygen may cause a low combustible gas reading. Too much oxygen, on the other hand, can cause a combustible gas meter to explode if gases and vapors are present in ignitable quantities.
 - b. Combustible gases, include both flammable and explosive gases and are measured next because in most cases the risk posted by fire or explosion is more immediate and life-threatening than exposure to toxic gases and vapors.
 - c. Toxic gases are the final test and are extremely important, and its position in the sequence is not in any way intended to minimize the seriousness of this common confined space hazard.

Oxygen - Combustible - Toxic Atmospheres

The employee using an air monitoring unit must be properly trained in the use of the test equipment facilities with the hazards and authorized to perform the tests. This person will need to "check out" (log in date & battery strength) the instrument and check the last documented calibration date. If the meter has passed the designated calibration interval, or fails calibration, the employee must bring this to his/her

supervisor's attention. Until the supervisor corrects the "problems" with the meter, it shall be taken out of service, dated and tagged.

V. Meter Detection Limits

A. Oxygen

1. Oxygen levels shall be between 19.5% and 23.5% for entry. Oxygen levels below 19.5% shall be considered an oxygen deficient atmosphere.
2. Any air with less than 19.5% oxygen shall not be entered without an approved self-contained breathing apparatus (SCBA).

B. Flammable/Combustible Gases and/or Vapors:

When the oxygen level exceeds 23.5% by volume, this is known as an oxygen-enriched atmosphere and represents a serious fire hazard.

1. Always test for oxygen first.
2. The acceptable safe level for flammable/combustible gases or vapors is 10% or less of the lower explosive limit (LEL) and is below 10% per hydrogen sulfide (H₂S).
 - a. Chlorine is not combustible/flammable but a strong oxidizer; never use water around chlorine gases.
 - b. LEL for hydrogen sulfide is 4.3%.
 - c. LEL for methane is 5%.

LELS can be found in material data sheets.

3. There will be no smoking in a confined space or within 10 feet of a confined space.

C. Toxic Atmospheres:

Toxic gases can irritate skin, eyes, nose and throat. All can kill or injure the worker.

1. Toxic gases or vapors must be identified prior to monitoring. The confined spaces at the City of Hannibal and sanitary sewer distribution systems owned by the constituent municipalities have a potential to contain toxic gases or vapors.
2. Entry into the permitted space shall not be attempted if the gas or vapor exceeds its specified permissible exposure limit (PEL).
3. Toxic materials may not only pose an inhalation exposure but also a skin contact hazard. The proper personal protective equipment is also necessary.

VI. Hot Work

A. Hot Work operations shall not be permitted in a confined space if the atmospheric level of a combustible gas is more than 10% of the LEL or if the airborne dust, mist or fumes may present a potential explosive hazard.

B. Gas cylinders or welding machines that are used for Hot Work operations shall be placed outside of the confined space where the work is being performed.

C. Never take compressed gas cylinders into a confined space.

D. A fuel supply valve and oxygen valve shall be shut off outside the confined space, and the welding torch and hose shall be removed from the confined space during lunch period, overnight or for any prolonged period that the space is unattended.

E. All welding leads that are used in a confined space should be de-energized if work is suspended during the lunch period, overnight or for any prolonged period that the space is unattended.

VII. Special Work Practices

Consideration shall be given to the nature of the work associated with each confined space entry permit with necessary precautionary measures specified on the permit

Others in the work area shall be notified that a permit has been issued for personnel to work in a specified confined space.

1. A ground fault interrupter is required when greater than 24 volt electric tools or extension lights are to be used in confined space.
2. Compressed gas cylinders, other than breathing air, shall not be taken into a confined space.
3. Special additional ventilation and/or breathing air shall be required when cutting or welding is done within a confined space. Hoses and nozzles of cutting or welding equipment must be carefully checked before use in a confined space. Any potential fire hazard must also be reviewed and the appropriate action taken. Should unusual operations such as welding, burning, or chemical cleaning be undertaken, prior approval of the Risk Coordinator should be sought.
4. Pneumatic tools shall be operated with compressed air only.
5. Only explosion-proof lighting is to be utilized in a confined space.
6. Open flames or smoking is prohibited in a confined space.

VIII. Entry Permit System

- A. Before entry is authorized, an entry supervisor shall authorize the entry (An entry supervisor may also serve as an attendant or entrant at the time of entry.)
- B. The entry supervisor can cancel authorization when a condition not allowed arises.

IX. Duties of Entrants

All authorized entrants shall:

- A. Know the hazards that may be faced during entry, including the signs or symptoms and consequences of exposure;
- B. Properly use the equipment required by the permit for safe entry;
- C. Maintain constant communication with the attendant as necessary to enable the attendant to monitor entrant's status;
- D. Alert the attendant of any warning sign or symptom of exposure to a dangerous situation or detection of a prohibited condition;
- E. Exit from the permit space as quickly as possible whenever an order to evacuate is given, an evacuation alarm is activated, the entrant recognizes a warning sign or symptom of exposure or the entrant detects a prohibited condition.

X. Duties of Attendants

- A. The attendant must be in constant communication with the entrant.
- B. The attendant must be able to notify THE DESIGNATED RESCUE TEAM in the event of an emergency without leaving the confined space area. This can be done either telephone or two-way radio. In the event of an emergency inside the confined space, the outside attendant must be able to send an alarm or signal to notify THE DESIGNATED RESCUE TEAM.
- C. If a spill, fire or other incident should occur which may affect the attendant or those inside the confined space, the entrants in the space must be informed to leave the space.
- D. The attendant must be familiar and know the potential hazards of the permit space and the signs, symptoms, consequences and behavioral effects of exposure.
- E. The attendant must keep an accurate count of entrants.
- F. The attendant must monitor both inside the confined space and outside the space and order evacuation under appropriate conditions.

- G. The attendant must be familiar with proper operation of non-entry rescue equipment such as retractable tripod, winches, etc.
 - H. The attendant is restricted to non-entry rescues and must remain outside the confined space until relieved by another attendant.
 - I. The attendant must summon rescue and other emergency services as soon as the attendant determines the need for assistance.
 - J. The attendant must take appropriate action when unauthorized persons approach or attempt to enter permit space.
- XI. Duties of Entry Supervisors:
The Entry Supervisor shall:
- A. Know the hazards that may be faced during entry including the mode, signs or symptoms and consequences of exposure;
 - B. Verify that all tests specified in the permit have been conducted and that all procedures and equipment specified in the permit is available and in place before enforcing the permit and allowing entry to begin.
 - C. Review and re-evaluate entry conditions at appropriate intervals and upon transfer of responsibility to determine that acceptable entry conditions have been maintained.
 - D. Terminate the entry when the entry operations have been completed or a condition arises in or near the permit space.
 - E. Verify that rescue services are available and that the means for summoning them are operable;
 - F. Remove unauthorized individuals who enter or attempt to enter the permit space.

EXCAVATION/TRENCHING

The following policies/procedures/rules shall be followed by all City of Hannibal supervisory personnel during all excavations/trenching operations. Each supervisor is responsible for training his/her employees in company safety policy concerning excavation

DEFINITIONS

Excavations: any manmade cavity of depression in the earth's surface, including its sides, walls, or faces formed by earth removal and producing unsupported earth conditions by reasons of excavation.

Trench: a narrow excavation made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench is not greater than 15 feet.

Benching: a method of protecting employees from cave-ins by forming the sides of an excavations in one or a series of horizontal levels or steps usually with vertical surfaces between.

Shield: a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within a structure.

Shoring: a structure such as a metal, hydraulic, mechanical or timber system that supports the sides' o: forming the sides of an excavation so as to prevent cave-ins by sloping the sides to an angle not steeper than one and one half horizontal to one vertical (34 degrees measured from the horizontal).

GENERAL REQUIREMENTS

- a. Remove or support any surface encumbrances that are hazardous to employees
- b. Determine the location of any underground utility or other installations that may be encountered during excavation. Support or remove these installations as necessary for employee protection.
- c. Structural ramps for access/egress shall be designed by a competent person, and shall use walking surface treatments to prevent employee tripping and slipping. Stairways, ladders, or ramps shall be located in trenches more than 4' deep so as to require no more than 25' of lateral travel.
- d. Provide employees exposed to vehicular traffic with high visibility vests.
- e. Do not permit employees to get underneath loads handled by lifting or digging equipment. Employees shall stand away from vehicles being loaded/unloaded to prevent being struck by spillage or falling materials.
- f. Provide a warning system for mobile equipment operators who cannot see the edge of the excavation: barricades, hand/mechanical signals, logs.
- g. Prevent employee exposure to oxygen deficient or hazardous atmospheres in excavations by providing atmospheric testing, ventilation, and respiratory protection equipment as appropriate. Have emergency rescue equipment available where hazardous atmospheres exist. Do not allow employees to work in excavations where there is accumulated water or it is accumulating unless adequate protection is used, such as shielding/support against cave-ins, dewatering methods, or safety harness/lifeline.
- h. Use shoring, bracing, or underpinning to ensure stability of structures adjacent to the excavation.
- i. Protect employees from loose rock or soil falling or rolling from an excavation face by removal of material or installing protective barricades. Protect employees from materials falling or rolling into excavations by keeping soil and other material and equipment at least 2' from the edge of the excavation or by use of retaining devices.
- j. Conduct inspections daily, or more frequently if conditions warrant, for evidence of possible cave-ins, protection system failures, hazardous atmospheres or other hazardous conditions. Correct conditions as necessary.
- k. Provide walkways or bridges if employees must cross over excavations. Include standard guardrails if the public must cross over. Provide barricades or other protection against falling into excavations.

PROTECTIVE SYSTEM REQUIREMENTS

Each employee in an excavation shall be protected from cave-ins by an adequate protective system except when:

- Excavations are made entirely in stable rock; or
- Excavations are less than 5 feet in depth and examination of the ground by a competent person provides no indication of potential cave-in

Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

The slopes and configurations of sloping and benching systems shall be selected and constructed by the employer or his designee.

Members of support systems shall be security connected together to prevent sliding, falling, kick outs, or other predictable failure.

EXCAVATION SAFETY RULES

1. Excavations must be barricaded to protect pedestrians and vehicles and proper access provided.
2. Spoil dirt may be used to barricade one side of a ditch or similar excavation - all dirt must be piled at least 3 feet back from edge of the excavation (and must be at least 3 feet high when used as a barricade).
3. Barricade excavation areas before "Hole Is Opened" or ahead of work progress.
4. Excavations must be sloped or shored when deeper than 5 feet.
5. Check all excavation walls before entering and after a heavy rain or thaw. Check shoring daily or more often in extremely wet weather.
6. An excavation safety/checklist is required before entering an excavation when deeper than 5 feet is included in this manual.
7. Nobody is permitted in an excavation when equipment is working next to the edge.

EXCAVATION/TRENCHING CHECKLIST

*	Remove/support surface encumbrances.
*	Determine location of underground utility or other installations.
*	Structural ramps designed with surface treatments to prevent tripping/slipping. Stairways, ladders, and ramps located in trenches more than 4' deep designed w/no more than 25' of lateral travel.
*	High visibility vests provided.
*	Instruct employee to stand away from vehicles handling, lifting or digging equipment while being loaded/unloaded.
*	Warning systems such as barricades, hand/mechanical signals, logs, etc., provided for mobile equipment operator.
*	Provide atmospheric testing, ventilation, and respiratory protection equipment.
*	Provide adequate protection in work area where water has accumulated during excavations, i.e. shielding/support against cave-ins, dewatering methods, or safety harness/lifelines.
*	Shoring, bracing, or underpinning used to ensure stability of structures.
*	Employees protected from loose rock or soil falling or rolling from an excavation face by removal of materials or installing protective barricades.
*	Daily inspection conducted.
*	Walkway or bridge provided for crossing over excavations. (Standard guardrail included if used by public.)
*	Excavation made entirely in stable rock.
*	Adequate protective system provided in excavation to protect from cave-ins.
*	Protective system has capacity to resist all load without failure that are intended or could be expected to be applied or transmitted to the system.
*	Slopes and configurations of shoring and benching systems selected/constructed by employee.
*	Support systems security connected together to prevent sliding, falling, kick outs or other predictable failure.
*	Barricades provided for excavation areas. Spoil dirt may be used to barricade one side of a ditch or similar excavation (must be 3 feet back from edge and at least 3 feet high).

*	Excavation area barricaded before hole is opened or work progresses.
*	Do not enter an excavation when equipment is working next to area.

TRENCHING & EXCAVATIONS

FIELD CHECK-LIST

Before Trenching or Excavation

CHECK:	Soil conditions or other material to be dug.
CHECK:	Proximity to utilities, buildings and sources of vibrations.
CHECK:	Owners of utilities, service, or transmission piping, etc., and arrange for shutdown or relocating of facilities, if necessary.
CHECK:	For previously disturbed ground.
CHECK:	For trees, boulders, or other employee hazards.
CHECK:	Adequacy and availability of all equipment, including personal protective gear, shoring materials, signs, barricades, and machinery.

During Trenching or Excavation

CHECK:	For changing ground conditions; particularly after rainfall.
CHECK:	For possible oxygen deficiency or gaseous conditions.
CHECK:	Adequacy of shoring and/or sloping as work progresses.
CHECK:	For maintenance of entrance and exit facilities.
CHECK:	All sheeting, bracing, shoring and underpinning.
CHECK:	For changes in vehicular and machinery operational patterns.

After Trenching or Excavation

CHECK:	Depth of trench or excavation, its sloping and shoring.
CHECK:	Sloping of banks, sides and walls in relation to depth of cut, water content of soil; vibrations.
CHECK:	Entrance and exit facilities.
CHECK:	Location of heavy equipment – power shovels, derricks; trucks.
CHECK:	That excavated material is two feet or more from edge of opening.
CHECK:	The adequacy of portable trench boxes or trench shields, if used.
CHECK:	For correct positioning of cross braces or trench jacks to prevent sliding, falling, or kick outs.

EXCAVATION AND SHORING

Shoring is employed in many construction operations. Excavation shoring, as concerns building excavations and trenches, is intended for the protection of workmen and property, and often the general public as well. Men working in excavations must always be aware of the fact that much of their safety depends upon themselves. Even though there is a daily inspection of bracing systems, certain conditions may arise suddenly that come to the attention only of the man

on the job. You must be able to recognize dangers when you see them, and report them before they cause injury to yourself or those around you.

Accidents such as falls or being struck by objects in and about excavations and trenches often result because workmen fail to follow the safety instructions that have been given them.

Shoring presents problems and hazards. That is another of the reasons why safety education has become so important in the field of construction.

One of the major purposes of shoring is to protect you while you work in the excavation. Bracing systems are intended to prevent sliding, slipping, caving, squeezing, or any other movement of the face of the excavation that could endanger men in the excavation.

At times, soil conditions make it possible to slope excavations, but in many cases the sides must be supported by shoring. Regular physical inspection should be made of faces and banks where there may be loose materials. Any surface with dangerous material should be scaled. Employees should not work one above another where there is a danger of falling rock or materials.

Shoring of adjacent buildings may be necessary when their walls are weakened by excavation. Sidewalks, if undermined during construction, require shoring for the protection of the public and the men working below.

Always make use of stairways, ramps or ladders when you enter or leave an excavation. Climbing or jumping is hazardous.

Because shoring is often subjected to considerable pressures, it demands regular inspection. Every employee engaged in excavation must take the responsibility of helping to check on shoring because your own safety is at stake. If you detect any unusual conditions you must report them immediately. When using screw jacks in shoring, be careful of them slipping and throwing you forward with jacking in order to reduce the hazards due to failure or slipping of jacks.

In general, you should not work under structures or other objects that are supported by jacks alone. Operators of equipment and all employees on excavations must be alert to the danger of shoring and walls being struck by swinging loads.

TRENCHING OPERATIONS

Trenching operations account for many injuries. Accidents can happen to employees working in trenches, to other employees as a result of excavated materials, and to employees working in the vicinity of trenches.

As is the case with most accident situations, a few simple precautions take most of the risk out of trench construction.

First of all, men working in trenches must have hard hats and should wear sturdy shoes. Employees should be safely spaced out in a trench unless there is a necessity of working together. They should also stay out of the immediate area of excavating equipment, and not work ahead of the shoring.

Employees are sometimes injured by slides of earth or rock into the trench in which they are working. All excavated materials should be placed a safe distance back from the edge of the trench. Employees should check with their supervisor for instructions as to how far back material should be placed.

Even when this is done, large heavy objects can roll or slide down the incline and into the trench. Tools and rocks should either be placed on the outer slope of the excavated materials, or else on the other side of the trench if the surface is flat.

When employees are working on hard surface roads where a flow of traffic is being maintained, it is important that small stones be removed off the road. Stones are sometimes thrown with great speed by the tires of passing cars and can cause serious accidents.

Broken arms and legs and other injuries can result when employees fall into construction trenches. They result because employees fail to look where they are going, when they walk too close to the edge, or when they attempt to leap across the trench.

Rocks and tools thrown near the edge are not only a hazard to employees working in the trenches, but can cause falls into the trench by employees walking on the surface.

Use extra care in venturing near the edges of trenches and other excavations when the weather is bad and there are icy or muddy conditions.

TRENCH EXCAVATION

A necessary consideration in the planning of sewer, pipeline and similar subsurface work by the area cover (trench and backfill) method is preventing trench wall cave-in and soil movement. Either or both may result in death of serious injury to workers, plus damage to adjacent structures, utilities, and facilities.

1. The hazards of trench excavation are:
 - a. Death by suffocation or crushing when falling soil buries a worker.
 - b. Materials falling on a worker in the trench.
 - c. Falls of persons when climbing into or out of the excavation.
 - d. Men working too close together.
 - e. Stumbling over equipment or excavated material or falling into the trench.
 - f. Encountering toxic, irritating or flammable gases.
2. Caving of side walls is the worst hazard. Most accidents of this type occur because:
 - a. Taking a chance without shoring; or inadequate shoring in an attempt to reduce cost.
 - b. Inadequate knowledge of the shoring necessary or misjudgment of soil stability.
 - c. Failure of apparently adequate shoring due to unexpected or transient loads superimposed on the shoring structure or ground surface at the edge of the trench, or from vibration due to traffic.
 - d. Use of defective shoring material.
 - e. Failure to maintain shoring properly after changes incidental to operations, or after damage by washouts or heavy rains.
 - f. Failure to place removed soil at a safe distance from the edge of the excavation.
 - g. Undercutting of trench walls by trenching machines not properly leveled.
3. Proper sheeting and bracing (shoring) will prevent both cave-in and probable soil movement.

4. Proper trench shoring cannot be reduced to a standard formula. Each job must be treated as an individual problem, because of the variable conditions existing on each job. Some of the important factors to be considered in planning the job are:
 - I. *Nature of soil structure.* Soil structure varies from hard rock at one extreme to soil containing sufficient water to produce hydrostatic pressure. Hard rock may contain faults in strata which make it unstable when cut through. Normal moisture content in soil affects its stability; possible variations in moisture content must be considered in determining margins of safety. Sandy soil, or soil which has been back-filled, is very unstable and usually requires tight sheeting where the trench depth exceeds four feet.
 - II. *Fluctuating weather and moisture conditions.* Rainfall, freezing and thawing, overflow of adjacent streams, storm drains, or sewers, and melting of snow all produce change in the condition of the soil that should be considered. Water from any source probably will increase the rate of seepage, and may reduce the cohesion of the soil or swell the soil thereby increasing the pressure on the sheeting and bracing. A trench in frozen ground may be safe with little or no sheeting; thawing may cause the entire bank to cave.
 - III. *Proximity of other structures or sources of vibration.* Shoring not otherwise necessary may be needed to prevent dislocation of foundation soil or structure of an adjoining building, or of curb lines, trees, or utility poles. Also to be considered is vibration which may arise from machine operations (as from punch presses or forging hammers) in nearby buildings, passing vehicular or railway traffic, or blasting. Equipment used on the job (such as material trucks, pile drivers, air spades, or power ramrods) may also produce vibration which should be considered in planning shoring.
 - IV. *Trench dimensions.* As width of the trench increases, the cross braces or struts must be increased in cross-section to maintain the necessary rigidity. Remember that with soil possessing sufficient cohesion to act as a solid, the side pressures reach a maximum at a point slightly higher than one-half the depth of the cut... and with dry granular and saturated soils, the side pressures increase in proportion to the depth of the excavation.
5. Standard shoring tables are available in any safety manual, and should be consulted before excavation begins. Greater factors of safety should be provided as required by job conditions. Heavier than minimum sizes of materials will usually be required if the trench is to be kept open for a considerable period.

EXCAVATIONS

Excavations are still considered among the most hazardous of construction operations. Almost all injuries and deaths that occur in trenching or excavation work are the result of ignorance or disregard of a few basic safety rules. Take a moment and think about the most commonly violated safe work practices. For example:

1. According to OSHA, when must a trench or excavation be supported by shoring, sheeting, bracing or sloping? (Answer) Five feet or more – when the soil is particularly unstable or when workers will be working with their heads below the ground surface level such as working on hands and knees.
2. What is the minimum distance excavated material may be piled from the edge of the excavation? (Answer) 24 inches. Furthermore, materials such as pipes, rounded boulders, etc., should be adequately secured so that they will not roll into the trench.

3. What is the maximum distance a worker should have to travel to reach a ladder leading out of the trench? (Answer) 25 feet, and the ladder should extend three feet above the ground level surface.
4. What is the "Angle of Repose"? (Answer) The greatest angle above the horizontal plane at which excavated material will lay without sliding.
5. Do sources of vibration such as nearby vehicles, heavy equipment, railway traffic, blasting or pile drivers materially affect soil stability? (Answer) Yes. Vibrations are a frequent cause of cave-ins.
6. When the slope of the excavation approximates the angle of the excavated material, is it reasonable to assume the excavation is a safe work area? (Answer) Generally yes.
7. The usual compliance time to correct an unsafe excavation condition is:
 1. 1 day, 2. 3 days, 3. At Once, 4. 5 days? (Answer) #3 – at once.
8. Equipment working near high voltage electric power lines shall have a clearance from the point of operation to lines of at least: 1.6 feet, 2. 15 feet, 3. 20 feet, 4. 10 feet? (Answer) #4 – 10 feet.
9. What is the most common cause of trench and excavation cave-ins? (Answer) Inadequate shoring in an intent to cut cost or save time.
10. What is the only safe procedure to follow when installing or removing shoring systems from trenches or excavation? When installing shoring, always work from the top down. Such installation should closely follow the digging. When removing shoring systems, work from the bottom up. Jacks or braces should be released slowly and, in unstable soil, ropes should be used to pull out the jacks or braces from above after the men have cleared the trench.

In summary, proper trench shoring cannot be reduced to a standard formula. Therefore, each job must be treated as an individual problem because of the variable conditions existing on each job. Whenever "things do not look right", the workers should immediately leave the trench and discuss the situation with the foreman.

FLEET SAFETY

GENERAL SAFETY RULES

- A. Only those employees specifically authorized and who possess a valid license or permit for the equipment being used shall operate City-owned motor vehicles or personally owned vehicles on company business.
- B. Drivers shall know and obey all state and local motor vehicle laws applicable to the operation of their vehicle.
- C. The driver shall drive at safe speeds no greater than that permitted by law. Traffic, road, and weather conditions shall be given consideration in determining the safe speed within the legal limit at which the vehicle shall be operated.
- D. Maintain a safe distance from other vehicles. On dry pavement, under good driving conditions use the two (2) second rule for spacing. Pick out a point in the road that is clearly visible, like a shadow, bridge or road signpost. When the vehicle is front passes that mark, begin to count "one thousand and one, one thousand and two." If your vehicle passes the mark before you count one thousand and two you are following too closely. Slow down!
- E. A driver shall not permit unauthorized persons to drive, operate, ride in, or on, a City vehicle.
- F. Seat belts are to be worn at all times in City of Hannibal vehicles that provide seat belts. Should seatbelts not need be provided, per Missouri law the following exceptions apply:
 - 1. Vehicles with a gross weight of 6 or more tons.
 - 2. Vehicles manufactured prior to January 1, 1968.
- G. Employees shall not be permitted to ride or be placed on any part of a moving vehicle that is not designed for safe human transport or part of a work procedure.
- H. Employees shall not ride on trailers.
- I. Employees shall not jump on or off vehicles in motion.
- J. Make sure you are in a comfortable driving position and that you can reach all controls.
- K. Adjust mirrors, both the inside and on the outside. When you look at the outside mirror you should be able to see the rear fender.
- L. While operating any vehicle, refrain from cellular telephone use altogether, use hands-free equipment that allows both hands to stay on the wheel, or pull over to the side of the road before making or accepting a call.
- M. Never attempt to take notes, read work orders, or otherwise divert your attention while driving. All conversations should be suspended during heavy vehicular or pedestrian traffic, severe weather, or any other condition, which may compromise concentration and safety.

Inspection of Equipment

- A. The driver shall determine that brakes are in a safe operating condition before operating equipment. If brakes are not working properly, they must be corrected before vehicle is used.
- B. The driver shall inspect windshield wipers frequently and see that they are in good operating condition and that the windows and windshield give sufficient visibility for safe operation of vehicle.

- C. All lights and reflectors of vehicle shall be inspected by the driver doing any night driving, and if found defective, they shall be repaired immediately.
- D. Check proper operation of all other equipment, including handbrake - emergency brake, turn signals, horn, tires, steering, etc.
- E. Check all fluid levels prior to driving vehicle.
- F. The driver shall report any defects, which may have developed during the day. If the brakes are not working properly, they shall be adjusted or repaired before the vehicle is put in operation. Other items, which affect safety, shall be repaired prior to continued vehicle operation.
- G. The driver shall be responsible for ensuring that trash or debris will not escape the vehicle while in motion.

Exhaust Gas

The driver shall not operate the motor in any garage except when driving in or out, and then the motor shall be operated as little as practicable. The motor shall not be warmed up inside a garage nor shall the driver test motor operation in a garage unless the exhaust gas is carried directly to outside atmosphere, or doors and windows are open so that adequate ventilation exists.

Operation

- A. The operator of a motor vehicle shall clearly signal his intention of turning, passing or stopping.
- B. Upon a signal from a vehicle approaching from the rear, the driver of a company vehicle shall yield the right of way.
- C. Drivers shall be prepared to stop and the right of way shall be yielded in all instances where necessary to avoid an accident.
- D. The driver of a vehicle shall be courteous toward other operators and pedestrians. He shall operate his vehicle in a safe manner and shall yield the right of way to pedestrians and other vehicles when failure to do so might endanger any person or another vehicle.
- E. The driver shall stay a sufficient distance behind when following another vehicle so that he can safely stop the vehicle in the clear distance ahead.
- F. Drivers shall exercise added caution when driving through residential and school zones.
- G. When entering or leaving any building, enclosure, alley or street where vision is obstructed, a complete stop shall be made and the driver shall proceed with caution.
- H. Trucks on which derricks or booms are erected above traveling height shall not be moved except under the immediate direction of a designated employee, who shall give his undivided attention to the movement.
- I. Before a radio equipped vehicle is driven under or adjacent to energized equipment, especially in substation areas, the radio antenna shall be lowered and clearance checked in order to insure that proper clearances will be maintained between the vehicle and energized equipment.
- J. All ignition systems shall be turned off and no smoking permitted while refueling.
- K. When proceeding down a grade, the clutch shall not be disengaged. Trucks, particularly if heavily loaded, shall be in a lower gear on steep grades.
- L. Per Missouri law, headlights will be turned on during any period of inclement weather, when fog is present, or when the windshield wipers are used.

Parking

- A. When vehicles must be parked on the roadway, they shall be parked on the right hand side facing in the direction of traffic flow, whenever possible.
- B. When parking on a roadway, vehicles shall park off the traveled road surface, whenever possible. When vehicles must park closer than 10 feet to the traveled road surface, appropriate warning devices shall be used.
- C. Proper warning lights, reflectors or red flags in accordance with state or local requirements shall protect trucks or trailers stopped on any public roadway.
- D. Vehicles shall not be parked on bridges or over culverts except when necessary for work.
- E. Wheel chocks will be used on large vehicles whenever parked as an added protection along with the vehicle's emergency brake system.
- F. When it is necessary to park on an incline, the driver shall make sure the vehicle is left in a safe position. The engine shall be turned off, the vehicle placed in the lowest gear, or "park" position, and the parking brake set. The front wheels shall be cut into the curb, or if a curb is not present, the rear wheels shall be chocked.

Backing

- A. Whenever possible, the vehicle shall be positioned to avoid the necessity of backing later.
- B. Extreme caution shall be exercised when backing a vehicle, to avoid injury to persons and to prevent property damage. If another employee is present, he shall be stationed at the rear of the vehicle to assist the driver in backing the vehicle safely. Turn your head and look back, don't just look in the rear view mirror. Never back fast or far or into an intersection.
- C. When backing a vehicle which has an obstructed view to the rear:
 1. A reverse signal (back-up alarm) audible above the surrounding noise level shall be used, or
 2. An observer shall signal that it is safe to back.
 3. Back slowly.
 4. Watch both sides but do not depend entirely on mirrors.
 5. In any difficult backing situation, enlist the help of another person on the ground as a guide, when such help is available.

Stopping on Highway

- A. Stopping on the highway shall be avoided.
- B. When it is absolutely necessary to stop on the highway, extreme caution shall be used. Warning signals and lights shall be used.
 1. Rotating beacon shall be used, if vehicle is so equipped.
 2. Tail lights/emergency flashers shall be used.
 3. Flares or reflectors shall be placed to give adequate advance warning.
 4. If work is in progress, traffic control devices (together with flagmen, where necessary) shall be used. (See Section 501 - Work Zone Barricading)

Refueling Motor Vehicles

- A. Stop the engine before fueling.
- B. Avoid static sparks by inserting the hose nozzle firmly in the tank; making sure that metallic contact is made. Keep a hand on the nozzle throughout the entire delivery to prevent overflow.
- C. Maintain tight connections on the hose and nozzle to eliminate all leaks.

- D. Do not permit the tank to overflow.
- E. Drain the hose before removing the nozzle.
- F. Hang the nozzle securely, and see that the cap is placed tightly on the tank.
- G. Change clothing immediately if it is saturated with gasoline to prevent possible burns or injury to the skin.
- H. Use only stoddary solvents or some other high flashpoint solvent for cleaning purposes.
- I. Prohibit smoking in the area when delivering or receiving gasoline.

DRIVER SELECTION

The selection of employees who will be required to drive full or part-time will be done with care. Drivers of City vehicles can be considered qualified when they meet the following criteria:

- A. Possess a valid Missouri Driver's License of the proper class.
- B. At the supervisor's discretion, be capable of passing an eye exam to determine depth perception, visual acuity, vertical and lateral balance, field of vision, and color recognition.
- C. Successfully passes a road test administered by a supervisor.

PREVENTIVE MAINTENANCE

The preventive maintenance program for City vehicles is essential. The maintenance program will include the checking of vehicles daily and monitoring to assure proper maintenance. Repairs shall be made on noted defects.

EMPLOYEE VIOLATION OF SAFETY REQUIREMENTS

All employees found to be in violation of this section or other sections of this manual shall be subject to discipline in accordance with the Employee Guide to Success.

Employees may be disciplined at any time for any of the causes listed in the Employee Guide to Success and the employee will be advised in writing of the reason(s). A copy of the disciplinary notice will be placed in the employee's personnel file once the Supervisor's investigation is compiled.

PERSONAL PROTECTIVE EQUIPMENT

I. Policy Statement

- A. The City of Hannibal considers the safety and health of its employees to be of the utmost importance.
- B. All employees working on or visiting areas where hazardous activities are occurring (i.e., construction, operations, and maintenance) will be provided with and required to wear or use personal protective equipment as directed by this policy.

II. Purpose

- A. To require the use of personal protective equipment where there is reasonable probability an injury or illness can be prevented by such equipment. All employees working in or entering a hazardous environment will wear the required personal protective equipment. Failure to comply with all aspects of this policy is grounds for disciplinary action. This policy applies to operations, processes or work which involve(s) a hazardous environment.

III. Definitions

- A. **Anchorage** – A secure point of attachment for lifelines, lanyards or deceleration devices, and which is independent of the means of supporting or suspending the employee.
- B. **ANSI** - American National Standards Institute
- C. **Body harness** – A design of straps which may be secured about the employee in a manner to distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders with means for attaching it to other components of a personal fall arrest system.
- D. **Buckle** – Any device for holding the body belt or body harness closed around the employee's body.
- E. **Competent person** – A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as in their application and use with related equipment.
- F. **Connector** – a device which is used to couple (connect) parts of the system together. It may be an independent component of the system (such as a carabineer), or an integral component of part of the system (such as a buckle or D-ring sewn into a body belt or body harness, or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard).
- G. **DBA** - A unit for expressing the relative intensity of sound.
- H. **Dielectric Strength** - a nonconductor of direct electric current.
- I. **Eye and Face Protection** - protective devices intended to shield the wearer's eyes and face from a variety of hazards, shall meet the requirements and specifications established in the American National Standard Institute's Practice for Occupational and Educational Eye and Face Protection Z 87.1 - 2003.
- J. **Face shield** - A protective device commonly intended to shield the wearer's face, or portions thereof, in addition to the eyes, from certain hazards.
- K. **Goggle** - A protective device intended to fit the face immediately surrounding the eyes in order to shield the eyes from a variety of hazards.
- L. **Hand and Body Protection** - Protective gloves or clothing worn by an individual to reduce the risk of contamination or electric shock.

- M. **Hard Hats** – hard hats for protecting heads from impact and penetration, from falling and flying objects, shall meet the requirements and specifications established in the American National Standard Institute’s Safety Requirements for Industrial Head Protection, Z89.1 - 2003.
- N. **Hearing Protection** - A protection device designed to reduce the effects of noise exposure.
- O. **Lanyard** – A flexible line of rope, wire rope or strap which is used to secure the body belt or body harness to deceleration device, lifeline or anchorage.
- P. **PPE** - Personal Protective Equipment
- Q. **Personal fall arrest system** – A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body belt or body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.
- Q. **Protective Footwear** - A protective shoe or boot worn by an individual to reduce the risk of impact, contamination or electric shock. Footwear shall meet the requirements and specifications established in the American National Standard Institute’s guidelines (ANSI Z41 - 1991).
- R. **Respiratory Protection** - A protective device that is issued to reduce individual exposure to occupational disease caused by breathing air contaminates (e.g. harmful dusts, fogs, fumes, mists, gases, smokes, particles, sprays, and vapors). Respirators shall meet the requirements and specifications established in the American National Standard Institute’s guidelines (29 CFR 1910.134).
- S. **Safety Restraint Device** - A safety device (seat belts, shoulder harnesses, etc.) used to restrain an individual in a moving vehicle to reduce the severity of injury.
- T. **Safety Vests/Shirts** - A vest or shirt worn by an individual working in areas where it is determined necessary that they be clearly visible.
- U. **Spectacle** - A protective device to shield the wearer’s eyes from a variety of hazards, depending on spectacle type.
- V. **Tie-off** – The act of an employee wearing personal fall protection equipment connecting directly or indirectly to an anchorage. It also means the condition of an employee being connected to an anchorage.

IV. Responsibilities

- A. Department/Division heads and supervisors are responsible for administration of this policy as it pertains to employees and work areas under their jurisdiction. Employees are responsible for observing safe operating procedures pertinent to their duties and for being familiar and complying with this policy.
- B. Department/Division heads shall identify the work areas and hazardous environments and formulate written policies for same.

V. Hard Hats

- A. Hard hats shall be worn by all employees who are required to work, including but not limited to, any of the following circumstances or conditions:
 1. Within a posted hard hat area;
 2. On any job where an employee may be struck by falling or flying objects or menaced by bumps, such as, but no limited to:
 - a) Traffic sign maintenance and installations;
 - b) Street lighting maintenance and installation;
 - c) Heavy equipment activities;
 - d) Shovel gang operations;

- e) All demolition activities;
 - f) All construction and excavation activities including road work;
 - g) Tree trimming or removal activities;
 - h) Below lift or scaffold activities;
 - i) Storage, stockpile, or inventory storage activities where posted.
 - j) Where the danger from electrical hazards exist
- B. Hard hats must, at a minimum, meet current OSHA Class G level, which protects against impact hazards and provides limited voltage protection (up to 2,200 volts).
- C. Bump style caps are not allowed.
- D. Hard hats are to be inspected, maintained, and worn in accordance with the manufacture's recommendations.
- E. Hard hats that sustain a heavy impact are to be taken out of service.

VI. Eye and Face Protection

- A. Proper eye protection may include, but not limited, the following: safety glasses, with or without safety side shields, splash goggles, face shields, welding helmet, and welding goggles
- B. Appropriate eye and face protection shall be worn by all employees who are required to work, including but not limited to, any of the following circumstances or conditions:
1. All operations where hardened metal tools are struck together.
 2. Where equipment or material is struck by a hand tool.
 3. Where the cutting action of a tool causes particles to fly.
 4. By other employees who may be exposed to flying particles.
 5. Mowing operation and chain saw use.
 6. Where woodworking or cutting tools are used head-high or overhead with the chance of particles falling or flying into the eyes.
 7. When cutting wire and cable, striking wrenches, using hand drills, chipping concrete, removing nails from scrap lumber, shoveling material head high, or using wrenches or hammers overhead, and on other jobs where particles of debris or materials may fall.
 8. Where exposed to splashes or corrosive chemicals or fine dust or mist.
 9. Where the face is exposed to radiant heat.
 10. For operations such as oxyacetylene welding, cutting, lead burning, and brazing.
 11. For any operation involving sawing or buffing metal, sanding, grinding, handling chemicals, or other hazards.
 12. Operation of powered landscape maintenance equipment (e.g., weed eater, trimmers, chippers, blowers, mowers, edger's, chain saws).
 13. All types of pneumatic tools (e.g., pressurized mechanical power washers).
- C. Selection - refer to selection chart and protective devices.
- D. Safety glasses are not required in transit between jobs.

VII. Hearing Protection

- A. All City employees will be provided with and required to wear an approved hearing protection device when exposed to noise which exceeds those levels and exposure limits as established by the Occupational Safety & Health Administration. Such protective devices shall have an Environmental

Protection Agency Noise Reduction Rating (NRR) so as to provide adequate protection. The following listing is representative (not all inclusive) of the activities possibly requiring the use of hearing protectors:

1. Operations using landscape maintenance equipment
 2. Operations at utility facilities
 3. Operations in construction areas
 4. Operations of heavy equipment
 5. Operations in machine shops
 6. Operations involving equipment used in street repair
- B. Supervisors are responsible for the distribution of hearing protectors and will share the responsibility for proper use.
- C. Hearing protective equipment (of a non-disposable nature) will be replaced only upon receipt of the original equipment, showing why it is no longer useful, or upon reasonable explanation as to why the equipment is missing or was destroyed beyond recovery. Should the equipment be damaged or lost through misuse or carelessness, the responsible employee may be charged the replacement cost of the equipment.
- D. The following table summarizes current permissible noise exposure limits:

<u>Duration per day, hours</u>	<u>Sound Level DBA</u>
8	90
6	92
3	97
2	97
1 1/2	100
1	105
1/2	110
1/4 or less	115

- E. The use of headset radios and music players by employees will not satisfactorily diminish ambient noise and may themselves create hazards and are, therefore, prohibited.

VIII. Safety Vests/Shirt

- A. To comply with the ANSI Class 2 Minimum Standards, employees working on, or near, a roadway shall be provided with apparel designed to warn motorists of their presence (orange safety vest or shirts).
1. Additional equipment such as orange gloves, cap, etc. may be provided if deemed appropriate.
 2. The roadway is defined as the area between the curb and where curbs would be if said area does not have curbs.
 - a. Employees working in any other area where it is determined necessary that they be clearly visible shall also be provided with safety apparel.
 - b. Employees upon being provided with appropriate safety apparel shall wear same when working in any of the areas outlined above.
 - c. Each supervisor is responsible for the distribution and proper use of this equipment.
 - d. Each employee provided with safety apparel is responsible for its maintenance and proper use when in their care.

- e. If this equipment is damaged or lost through misuse or carelessness, the responsible employee may be charged the replacement cost.

IX. Hand - Body Protection

A. Employees working in areas or operations where the following personal protective equipment is required shall wear the equipment as long as the hazard is or may be present.

1. Work clothing - Appropriate clothing is provided or required when working for the City. The clothing shall not interfere with the performance of an employee or expose him/her to unnecessary hazards. Long sleeve shirts may be required on certain operations.
2. Special clothing - Special clothing may be required to protect an employee from impacts and dust, fire and heat, vapors, moisture and corrosive liquids, as well as, temperature changes.
3. Gloves - Appropriate gloves are provided and their use required when an employee is working in an area where he/she is exposed to injury to the hands or fingers from material, machinery, heat, chemicals, electrical, contact, sharp objects, etc.
4. Each department or division is responsible for identifying those areas, operations, in which such equipment is necessary, including the type of equipment required.

X. Protective Footwear

A. To establish minimum foot protection requirements for those employees involved in job activities where such protection is normally required.

1. Shoes such as sneakers, sandals, canvas tops, are not acceptable in the work environment and are prohibited.
2. Leather work shoes or boots with durable soles must be worn by all field personnel.
 - a. This includes but is not limited to such occupations as street repair, park maintenance, firefighters, police officers, mechanics, utility service workers, maintenance personnel, building inspectors, etc.
 - b. Employees involved in working with or near electric utility lines or equipment shall have the appropriately designated footwear.
3. Each supervisor is responsible to ensure that proper footwear is being utilized by employees.

XI. Respiratory Protection

A. Respirators that are applicable and suitable for the purpose intended will be supplied to all employees when such equipment is necessary for their protection.

1. Respirators will be selected on the basis of hazards to which the worker is exposed. All existing inhalation hazards at various locations will be identified and personnel will be trained in the proper use of the equipment assigned to those particular hazards to which they are exposed.
 - a. Proper selection of respirators shall be made according to the guidance of 29 CFR 1910.134.
 2. Training will include the following:
 - a. Identification of the proper devices for the hazard involved.
 - b. Determining the proper fit.
 - c. Cleaning and care of the respirator(s).
 - d. Identifying worn and deteriorating parts, and replacement of same.

3. A respirator should be assigned to individual employees for their exclusive use, in order to prevent the spread of any communicable diseases.
4. Respirators will be cleaned and disinfected after use each day.
5. Clean respirators should be stored in a convenient sanitary place. Most respirators will be purchased with a re-usable plastic bag for this purpose.
6. Regularly inspect respirators for defects and deterioration of parts each time it is cleaned. If a defect is found, contact your supervisor (a substitute will be issued until yours can be repaired or replaced).
7. Inspections will be made of all respiring devices to check for proper use, cleanliness, and proper maintenance. Inspection reports will be kept on file in the respective department.
8. An initial physical will be performed to determine if an employee is able to perform his duties while using a respirator. A periodic physical examination will be performed to determine if any inhalation problems have occurred during their use.

XII. Vehicle Safety Restraint Devices

- A. All City vehicles and equipment designed to require or permit the installation of safety restraints (seat belts, shoulder harnesses, etc.) shall be so equipped.
- B. All drivers and occupants of City vehicles equipped with safety restraint devices are required to utilize them.
- C. All drivers of City vehicles equipped with safety restraint devices must require all passengers to utilize said equipment prior to the operation of the vehicle.
- D. The drivers of City vehicles shall not remove, defeat or deactivate any safety restraint device, and shall advise Vehicle Maintenance whenever said device is not functioning properly.
- E. The following may be considered exceptions of the above policies.
 1. When it becomes necessary due to an emergency to carry more passengers than the vehicle has safety restraints.
 2. Specific operations may be excluded from these regulations with written approval from the Department Director and City Manager.

XIII. Fall Protection

Purpose and Scope

The purpose of this fall protection program is to establish guidelines to protect all City of Hannibal employees engaged in outdoor or indoor work activities that expose them to potential falls from elevations. The scope of this fall protection program includes all municipal buildings and staff. In particular those staff engaged in work activities, which expose them to fall from heights of six (6) feet or more.

Goals

The goal of the fall protection program is to prevent the occurrence of falls from elevations of 6 feet or higher. This goal will be accomplished through effective education, engineering and administrative controls, use of fall protection systems, and enforcement of the program. This fall protection program will be continually improved upon to prevent all falls from occurring.

Definitions

Authorized Person. A person approved or assigned by the City to perform a specific type of duty or duties or to be at a specific location or job site, (building maintenance, roof repair, etc.)

Competent Person. A person capable of identifying existing and predictable hazards in the surrounding or working conditions, which are hazardous or dangerous to employees. A person who has the authorization to take prompt corrective action to eliminate such hazards.

Qualified Person. An individual, who by possession of a recognized degree, certificate, or professional standing or who by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, work or project.

Anchor Point. A secure point of attachment for lifelines, lanyards or deceleration devices. An anchor point must be capable of supporting at least 5,000 pounds (3,600 pounds if engineered/certified by a qualified person) per person and must be independent of any anchorage being used to support or suspend platforms.

Full Body Harness. Webbing/straps which are secured about an employee's body in a manner that will distribute the fall arrest forces over the thighs, pelvis, waist, chest and shoulders. Having means for attaching it to other components of a personal fall arrest system, preferably at the shoulders and or middle of the back.

Connector. A device which is used to couple (connect) parts of the personal fall arrest system together.

Deceleration Device. Any mechanism, such as a rope grab, rip-stitch lanyard, a specially woven lanyard, tearing or deforming lanyard, automatic self-retracting lifeline/lanyard, etc., which serves to dissipate a substantial amount of energy during a fall arrest.

Deceleration Distance. The additional vertical distance a falling employee travels excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an

employee's body harness attachment point at the moment of activation of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

Free Fall. The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free Fall Distance. The vertical displacement of the fall arrest attachment point on the employee's body harness between the onset of the fall and just before the system begins to apply force to arrest the fall. Free fall distance must not exceed six (6) feet. This distance excludes deceleration distance and lifeline/lanyard elongation distance.

Total Fall Distance. The maximum vertical change in distance from the bottom of an individual's feet at the onset of a fall, to the position of the feet after the fall is arrested. This includes the free fall distance and the deceleration distance.

Guardrail System. A barrier erected to prevent employees from falling to lower levels. This system includes a toe board, mid rail and top rail able to withstand 200 pounds of force applied in any direction.

Lanyard. A flexible line of rope or strap that has self-locking snap hook connectors at each end for connecting to body harness, deceleration devices, and anchor points.

Leading Edge. The edge of a floor, roof or other walking/working surface, which changes location as additional floor, roof, etc., is placed or constructed. A leading edge is considered an unprotected side or edge when not under active construction.

Lifeline. A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline). This serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low Slope Roof. A roof having a slope of less than or equal to 4 in 12 (vertical to horizontal). A roof with approximately a 19.5 degree slope or less.

Personal Fall Arrest System. A system used to arrest (catch) an employee in a fall from a working level. It consists of an anchorage location, connectors, a body harness, and may include a lanyard, deceleration device, lifeline, or any combination of the before-mentioned items.

Rope Grab. A deceleration device, which travels on a lifeline and automatically by friction, engages the lifeline and locks to arrest the fall of an employee.

Roof Work. The hoisting, storage, installation, repair and removal of materials or equipment on the roof.

Safety Monitoring System. A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards. All other fall protection systems must be deemed "infeasible" (through infeasibility study/review) to select/use monitoring system.

Snap hook. A connector comprised of a hook-shaped member with a closed keeper which may be opened to permit the hook to receive an object and when released, automatically closes to retain the object. Snap hooks must be self-losing with a self-locking keeper which remains closed and locked until unlocked and pressed open for connection or disconnection, thus preventing the opportunity for the object to “rollout” of the snap hook.

Steep Slope Roof. A roof having a slope greater than 4 in 12 (vertical to horizontal). A roof with a slope greater than 19.5 degrees.

Toe board. A low protective barrier that will prevent the fall of materials and equipment to lower levels, usually 4 inches or greater in height.

Unprotected Sides and Edges. Any side or edge of a walking or working surface (floor, ramp, roof, runway, etc.) where there is no guardrail at least 39 inches high.

Warning Line System. A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge, which designates an area in which work can be conducted without the use of guardrails, personal fall arrest systems, or safety nets to protect employees in the area. This will be utilized on any roof greater than 50 feet wide and in conjunction with a safety monitor only where the other forms of fall protection have been infeasible to use.

Types of Fall Protection Systems

- 1) An articulating man lift provided with a restraint system and full body harness to an anchor point below the waist (preferably at the floor level).
- 2) Guardrail with a toe board, mid rail, and top rail.
- 3) Personal fall arrest systems.
 - * Anchor points (rated at 5,000 pounds per person).
 - * Full body harness.
 - * Restraint line or lanyard.
 - * Retractable lanyard.
 - * Rope grabs.
 - * Connectors (self-locking snap hooks).
- 4) Engineered lifelines.
- 5) Warning lines.
- 6) Safety nets.
- 7) Safety monitor systems.

Appropriate fall protection will be determined by the task (job) to be performed.

Fall Protection Locations

Fall protection is required wherever the potential to fall six (6) feet or more exists. The City of Hannibal has identified the following places concerning fall protection:

- 1) All flat and low sloped roof locations, when within six (6) feet of the roof edge or during roof repair/maintenance (4:12 pitch or less).
- 2) All exterior and interior equipment platforms, catwalks, antennas/towers, etc.
- 3) All exterior and interior fixed ladders above 20 feet.
- 4) All mezzanine and balcony edges.
- 5) All open excavations or pits.
- 6) All tasks requiring use of the articulating man lifts.

- 7) All tasks requiring employees to lean outside the vertical rails of ladders (i.e. painting, stairwell light bulb replacement, etc.).
- 8) Scaffolding erection – 10 feet in height or greater.
- 9) Gym – light bulb replacement, painting.
Fall protection is not needed if an employee or employees are on a low slope roof for inspection/observation only.

Fall Protection Guidelines – Options

Engineering Controls

This should always be the first option for selection whenever possible (i.e. light bulb changing – telescoping arm, changing valve – relocate at ground level, etc.) or utilizing a contractor in extremely hazardous areas.

Guardrails

On all projects, only guardrails made from steel, wood, and wire rope will be acceptable. All guardrail systems will comply with the current Department of Commerce/OSHA standards (i.e. contain a 42” high top rail, mid rail, and toe board, which can withstand 200 pounds of force in any direction). These guardrails will be placed in the following areas if necessary or feasible based on job location or requirements:

- 1) On all open sided floors.
- 2) Around all open excavations or pits.
- 3) On leading edges of roofs or mezzanines.

Personal Fall Protection Systems

All employees on any project that will be required to wear a personal fall arrest restraint system will follow these guidelines:

- 1) A full body harness will be used at all times.
- 2) Only shock absorbing lanyards or retractable lanyards are to be used so as to keep impact forces at a minimum on the body.
- 3) Only nylon rope or nylon straps with locking snap hooks are to be used for restraints.
- 4) All lanyards will have self-locking snap hooks.
- 5) The employee will inspect all personal fall arrest equipment
The maximum free fall distance is not to exceed six (6) feet. Consideration must be given to the total fall distance. The following factors can affect total fall distance:
 - 1) Length of connecting means (i.e. lanyard length, use of carabiners, snap hooks, etc.).
 - 2) Position and height of anchorage relative to work platform/area, always keep above the head whenever possible.
 - 3) Position of attachment and D-ring slide on the full body harness.
 - 4) Deployment of shock absorber, maximum of 42”.
 - 5) Movement in the lifeline.
 - 6) Initial position of worker before free fall occurs (i.e. sitting, standing, etc.).

Calculating Total Fall Distance

It is the total length of shock absorbing lanyard + height of the person + the location distance of the D-ring from the work surface or platform. Always allow a minimum of six (6) feet of above ground, equipment, etc., at the end of the fall from the fall arrest point.

Engineered Lifeline

Lifeline systems must be designed and approved by an engineer or qualified person.

Lifeline systems must be engineered to have appropriate anchorages, strength of line designed to hold X number of individuals connected to it, line strength to aid in the arrest of a fall, and durability to hold a fallen employee(s) suspended until a rescue can occur.

Warning Line System

All work on a flat roof greater than 50 feet wide, which is performed six (6) feet or further back from the edge of the roof can be completed by installing a Warning Line and using a safety monitor. If the roof is flat and less than 50 feet wide, a competent person safety monitor may be used. Warning Lines will consist of the following:

- 1) Will be erected six (6) feet from the edge of the roof.
- 2) Be constructed of stationary posts made of wood or metal.
- 3) Wire or nylon rope and "Caution" tape will be strung from post to post and must be able to withstand 16 pounds of force.
- 4) The warning line will guard the entire perimeter of the roof where work is being performed.

If an employee must access an area within six (6) feet of the roof's edge, for reasons other than exiting the roof via a ladder or fixed industrial ladder, another employee must monitor that individual and warn him/her of any dangers. If another employee is not available to act as a safety monitor, then the employee must don a full body harness and attach a fall restraint lanyard to an anchor point to prevent reaching the edge of the roof.

The following criteria will be utilized to maintain all equipment in good working condition:

Full Body Harness

- 1) Inspect before each use.
 - * Closely examine all of the nylon webbing to ensure there are no burn marks, which could weaken the material.
 - * Verify there are no torn, frayed or broken fibers, pulled stitches, or frayed edges anywhere on the harness.
 - * Examine the D-ring for excessive wear, pits deterioration, or cracks.
 - * Verify that buckles are not deformed, cracked, and operate correctly.
 - * Check to see that each grommet, if present, is secure and not deformed from abuse or a fall.
 - * The harness should never have additional punched holes.
 - * All rivets should be tight and not deformed.
 - * Check tongue/straps for excessive wear from repeated buckling.
- 2) A competent person will complete an annual inspection of all harnesses and documentation will be maintained, see appendix 1.
- 3) Storage will consist of hanging in an enclosed cabinet, to protect from damage.
- 4) All harnesses that are involved in a fall will be destroyed.

Lanyards/Shock Absorbing Lanyards

- 1) Inspect before each use.
 - * Check lanyard material for cuts, burns, abrasions, kinks, knots, broken stitches and excessive wear.
 - * Inspect the snap hooks for distortions in the hook, locks and eye.

- * Check carabiner for excessive wear, distortion and lock operation.
 - * Ensure that all locking mechanisms seat and lock properly.
 - * Once locked, locking mechanism should prevent hook from opening.
 - * Visually inspect shock absorber for any signs of damage, paying close attention to where the shock absorber attaches to the lanyard.
 - * Verify that points where the lanyard attaches to the snap hooks are free of defects.
- 2) A competent person will complete an annual inspection of all lanyards and documentation will be maintained, see appendix 2
 - 3) Storage will consist of hanging in an enclosed cabinet, to protect from damage.
 - 4) All lanyards that are involved in a fall will be destroyed.

Snap hooks

- 1) Inspect before each use.
 - * Inspect snap hook for any hook and eye distortion.
 - * Verify there are no cracks or pitted surfaces.
 - * The keeper latch should not be bent, distorted or obstructed.
 - * Verify that the keeper latch seats into the nose without binding.
 - * Verify that the keeper spring securely closes the keeper latch.
 - * Test the locking mechanism to verify that the keeper latch locks properly.
- 2) A competent person will complete an annual inspection of all snap hooks and documentation will be maintained, see appendix 3.
- 3) All snap hooks involved in a fall will be destroyed.

Self-Retracting Lanyards/Lifelines

- 1) Inspect before each use.
 - * Visually inspect the body to ensure there is no physical damage to the body.
 - * Make sure all nuts and rivets are tight.
 - * Make sure the entire length of the nylon strap/wire rope is free from any cuts, burns, abrasions, kinks, knots, broken stitches/strands, excessive wear and retracts freely.
 - * Test the unit by pulling sharply on the lanyard/lifeline to verify that the locking mechanism is operating correctly.
 - * If the manufacturer requires, make certain the retractable lanyard is returned to the manufacturer for scheduled annual inspections.
- 2) A competent person will conduct monthly inspection of all self-retracting lanyards/lifelines and documentation will be maintained, see appendix 4.
- 3) Service per manufacturer specifications, 1-2 years.
- 4) Inspect for proper function after every fall.

Tie-Off Adaptors/Anchorages

- 1) Inspect for integrity and attachment to solid surface.
- 2) A competent person will complete an annual inspection of all tie-offs and anchorages and documentation will be maintained.
- 3) All tie-offs and anchorages will be destroyed after a fall.

Articulating Man Lift

- 1) Inspect before each use.
- 2) Inspect/service per manufacturer guidelines. Forklift, scissor lifts, and safety nets will be inspected at the beginning of each shift in use. Structural integrity of the forklift basket will be checked per the same schedule.
- 3) A competent person will complete an annual inspection of the forklift basket and documentation will be maintained.

Horizontal Lifelines

- 1) Inspect before each use for structural integrity of line and anchors.
- 2) A competent person will complete an annual inspection.

Guardrails

- 1) Temporary Systems – Daily visual inspection will be completed by a competent person.
- 2) Temporary Systems – Weekly, a complete structural inspection will be completed by a competent person.
- 3) Permanent Systems – Annual structural inspections will be completed by a competent person with future frequency of inspection defined based on conditions/controls present.

Storage and Maintenance of Fall Protection Equipment

- 1) Never store the personal fall arrest equipment in the bottom of a toolbox, on the ground or outdoors exposed to the elements (i.e. sun, rain, snow, etc.).
- 2) Hang equipment in a cool, dry location in a manner that retains its shape.
- 3) Always follow manufacturer recommendations for inspections.
- 4) Clean with a mild, nonabrasive soap and hang to dry.
- 5) Never force dry or use strong detergents in cleaning.
- 6) Never store equipment near excessive heat, chemicals, moisture, or sunlight.
- 7) Never store in an area with exposures to fumes or corrosive elements.
- 8) Avoid dirt or other types of build-up on equipment.
- 9) Never use this equipment for any purpose other than personal fall arrest.
- 10) Once exposed to a fall, remove equipment from service immediately

Training – Document the attendance of all trainees (see appendix 5)

All employees engaged in fall protection will be trained and have the knowledge to:

- 1) Recognize the fall hazards of/on their job sites.
- 2) Understand the hazards associated with working near fall hazards.
- 3) Work safely in hazardous areas by utilizing appropriate fall protection measures.
- 4) Understand and follow all components of this fall protection program.
- 5) Identify and understand the enforceable Department of Commerce/OSHA standards and ANSI standards that pertain to fall protection.

Enforcement

- 1) All staff are subject to discipline for violation of this policy.
- 2) Documentation of any violations will be kept in the staff member's personnel file.

Rescue Procedures

Rescue Methods/Options of Fallen Personnel

In the unlikely event that a fall arrest occurs on-site, personnel with the use of an articulating man lift or ladders where feasible, will rescue all employees. Alternate rescue would be through the local emergency services.

Communication Issues

In the event of a fall, the following people will be notified as soon as possible.

- 1) Rescue personnel (i.e. maintenance personnel)
- 2) Manager/Supervisor
- 3) Safety officer/coordinator
- 4) Fire Department and emergency medical services if necessary.

At the beginning of any work activity where fall protection is an issue, rescue plans must be identified and discussed with all employees in case of a fall. The Public Works Superintendent will develop the rescue plan(s).

All employees involved in a fall arrest or fall will be sent immediately for a medical evaluation to determine the extent of injuries, if any.

Fall Investigation

All fall investigations will be conducted by Safety Officer/Coordinator.

The following documentation will be completed as part of the fall investigation:

- 1) Interviews with staff and witnesses.
- 2) Employee injury/accident report.
- 3) Supervisor injury/accident report.

Program Evaluation

This fall protection program will be evaluated periodically to determine the effectiveness. The following criteria will be used to evaluate its performance:

- 1) Accident reports.
- 2) Number of accidents
- 3) Management/staff compliance with program components.
- 4) Periodic on-site audits.
- 5) Staff feedback and interviews.

Contractors

All outside contractors working in or on the premises of the City of Hannibal will be required to follow the guidelines set forth in this fall protection program. Contractors in the pre-job meeting will be informed of these requirements as well as the on-site construction rules that apply.

City of Hannibal
Full Body Harness
Annual Inspection Checklist

Harness Make/Model: _____

Serial Number: _____ Lot Number: _____

Date of Manufacture: _____ Date of Purchase: _____

Comments: _____

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Hardware: Includes D-rings, buckles, keepers and back pads. Inspect for damage, distortion, sharp edges, burrs, cracks and corrosion.	Accepted Rejected	
2) Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted Rejected	
3) Stitching: Inspect for pulled or cut stitches.	Accepted Rejected	
4) Labels: Inspect making all labels are securely held in place and are legible.	Accepted Rejected	
5) Other:	Accepted Rejected	
6) Other:	Accepted Rejected	
7) Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

City of Hannibal

Appendix 2

**Lanyards
Annual Inspection Checklist**

Lanyard Make/Model: _____

Serial Number: _____ Lot Number: _____

Date of Manufacture: _____ Date of Purchase: _____

Comments: _____

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Hardware: (Includes snap hooks, carabiners, adjusters, keepers, thimbles and D-rings) Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion and proper operation.	Accepted Rejected	
2) Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted Rejected	
3) Stitching: Inspect for pulled or cut stitches.	Accepted Rejected	
4) Synthetic Rope: Inspect for pulled or cut yarns, burns, abrasions, knots, excessive soiling and discoloration.	Accepted Rejected	
5) Energy Absorbing Component: Inspect for elongation, tears and excessive soiling.	Accepted Rejected	
6) Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
7) Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

Snap hooks/Carabiners
Annual Inspection Checklist

Hook/Carabiner Make/Model: _____

Serial Number: _____ Lot Number: _____

Date of Manufacture: _____ Date of Purchase: _____

Comments: _____

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Physical Damage: Inspect for cracks, sharp edges, burrs, deformities and locking operations.	Accepted Rejected	
2) Excessive Corrosion: Inspect for corrosion, which affects the operation and/or strength.	Accepted Rejected	
3) Markings: Inspect and make certain marking(s) are legible.	Accepted Rejected	
4) Other:	Accepted Rejected	
5) Other:	Accepted Rejected	
6) Other:	Accepted Rejected	
7) Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

City of Hannibal

Appendix 4

Self-Retracting Lanyard/Lifeline
Annual Inspection Checklist

Self-Retracting Lanyard/Lifeline Make/Model: _____

Serial Number: _____ Lot Number: _____

Date of Manufacture: _____ Date of Purchase: _____

Comments: _____

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Impact Indicator: Inspect indicator for activation (rupture of red stitching, elongation indicator, etc.).	Accepted Rejected	
2) Screws/Fasteners: Inspect for damage and make certain all screws and fasteners are tight.	Accepted Rejected	
3) Housing: Inspect for distortion, cracks and other damage. Inspect anchoring loop for distortion or damage.	Accepted Rejected	
4) Lanyard/Lifeline: Inspect for cuts, burns, tears, abrasion, frays, excessive soiling and discoloration. (See impact Indicator section.)	Accepted Rejected	
5) Locking Action: Inspect for proper lock-up of brake mechanism.	Accepted Rejected	
6) Retraction/Extension: Inspect spring tension by pulling lanyard out fully and allowing to retract fully (lifeline must be taut with no slack).	Accepted Rejected	
7) Hooks/Carabiners: Inspect for physical damage, corrosion, proper orientation and markings.	Accepted Rejected	
8) Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
9) Overall Disposition	Accepted Rejected	Inspected By: Date Inspected:

SAFETY INCENTIVE PROGRAM

I. PURPOSE:

The purpose of this program is to promote safety awareness.

II. RULES/DEFINITIONS:

An employee is required to report all injuries to his/her supervisor, no matter how slight. The Safety Committee will be responsible to review all accidents/incidents. A preventable accident is one in which the employee failed to do everything he or she could have reasonably been expected to do to prevent it. The Safety Committee will make classification of accidents or injuries as "preventable" or "non-preventable".

The failure to report an accident, injury, property damage, or violation of a Safe Work procedure may result in disciplinary action. Failure to provide sufficient information on the appropriate report may result in the Safety Committee ruling that the accident was "preventable".

III. PROGRAM:

The program rewards employees by maintaining a good safety record. As a safety incentive, a safety incentive may be provided in conjunction with a departmental safety meeting on an every other year basis is the amount equivalent to \$10/employee; as well as steel toe boot reimbursement allowance in the amount of \$75 in alternating years.

OCCUPATIONAL ILLNESS AND INJURY CONTROL

In addition to methods cited previously, there are several steps which can be taken to reduce the possibility of occupational illness and injuries.

PHYSICAL FITNESS

The fitness of each employee is the key in preventing personal injuries. Employees are encouraged to maintain good health and exercise habits.

FIRST-AID TREATMENT FOR SICK OR INJURED EMPLOYEES

1. Injuries, regardless of how minor, must be reported to the supervisor and call First Nurse. If the supervisor is not available the injured employee should contact First Nurse and follow their instruction and then report the injury to their supervisor. The supervisor must see that the injured employee seeks first aid or medical treatment.
2. The family of an employee who is seriously ill or injured must be promptly notified by the supervisor or his/her representative.
3. The Department Director shall be notified by the supervisor or his/her representative.

First Nurse Telephonic Case Management Program

Program facilitates immediate telephonic nurse contact on a 24/7 basis for injured employees while providing immediate accident reporting to the Clerk's Office and MIRMA as soon as accidents are reported. Telephonic nurse contact will assess and advise employee of the most prudent course of medical treatment. Nurse will triage patient care to ensure appropriate and timely medical care while minimizing any lost time of regular work hours. Telephonic nurse follow up with injured employee and authorized medical provider to assess appropriateness of care while coordinating information to MIRMA. Nurse will document contact in TPA claim system and complete the majority of the First Report of Injury.

It is not necessary to contact FirstNurse in the event of a catastrophic injury where immediate medical intervention is necessary.

MIRMA **FIRSTNURSE**
a product of CCMI

IN EVENT OF WORK INJURY,
CALL IMMEDIATELY.

FIRSTNURSE
844.229.8555

24-HOURS A DAY, 7-DAYS A WEEK AND HOLIDAYS.

REMEMBER: All injuries should be immediately reported to your supervisor. All injuries requiring medical care should be reported to FirstNurse before seeking treatment. Phone lines are open 24/7.

Present this card with your prescription to the pharmacy each time services are obtained.

Pharmacy Inquires
Jordan Reses Prescription Management Services
Bln #: 600518 Group#: 30011024

Eligibility/Drug Coverage Inquiries: 800-848-4050
After hours: 888-454-0265
First fill maximum: 14 Day Supply

MIRMA

EMERGENCY MEDICAL TREATMENT

In the event that a serious injury occurs which requires medical treatment, administer first-aid as necessary and call an ambulance. In the event of an emergency medical situation, treatment should be obtained at the following

INTERACTION OF MEDICINE

An employee taking medication which causes dizziness, blackouts, drowsiness, double visions, impaired judgement, or other similar reactions shall not be allowed to work until treatment is completed, and the effects have dissipated.

INTOXICATION OF EMPLOYEES

An employee reporting to work who is obviously under the influence of alcohol or drugs shall be suspended immediately pending a thorough investigation. Upon evaluation of the facts and confirmation of a violation of work rules, the employee will be dealt with in accordance with the City's employee Guide to Success.

TEMPORARY TRANSITIONAL DUTY

Introduction

Temporary Transitional Duty Programs have proven to be cost-effective and to contribute to the timely recovery of an employee who has been injured but still possesses the ability to work in a limited capacity. Because the City wishes to remain at the forefront of occupational health and safety, it has adopted a Temporary Transitional Duty Program for its employees.

Purpose

This policy establishes the authority for temporary transitional duty assignments and procedures for granting temporary transitional duty to eligible employees.

Policy

Frequently employees who, because of injury, illness or disability, are temporarily unable to perform their regular assignments are capable of performing alternative assignments. Temporary transitional duty can provide employees with an opportunity to remain productive and return to work before they have reached maximum medical improvement. It also provides a work option for employees who may otherwise risk their health and safety or the safety of others by remaining on duty when physically or mentally unfit for their regular assignment. Therefore, it is the policy

of the City of Hannibal that eligible personnel are given a reasonable opportunity to work in temporary transitional duty assignments if available.

Definitions

Eligible Personnel: For purposes of this policy, any employee suffering from medically certified illness, injury or disability requiring treatment of a licensed health-care provider and who, because of injury, illness or disability, is temporarily unable to perform the regular assignment but is capable of performing temporary alternative assignments.

Maximum Medical Improvement: The point when recovering from injury, illness, or disability, at which an employee has reached maximum medical improvement.

Procedures

A. General Provisions

1. Temporary transitional duty positions are limited in number and variety.
Therefore,
 - a. personnel injured or otherwise disabled in the course and scope of employment shall be given preference in initial assignment to transitional duty; and
 - b. assignments may be changed at any time if deemed in the best interest of the City while keeping within the medical restrictions; and
 - c. eligibility to participate in the program will cease when the employee has reached maximum medical improvement.
2. The Family and Medical Leave Act, Fair Labor Standards Act, Americans with Disabilities Act, or other Federal and State law remain applicable to employees accepting transitional duty assignments.
3. No specific positions within the City shall be established for use as a temporary transitional duty assignment, nor shall any existing positions be designated or utilized exclusively for personnel on temporary transitional duty.
4. Transitional duty assignments are strictly temporary and typically do not exceed 90 days in duration. After 90 days, personnel on temporary transitional duty who are not capable of returning to their original duty assignment shall:
 - a. present a request for an extension of temporary transitional duty (not to exceed an additional 90 days), with supporting documentation, to the Department Manager, or
 - b. pursue other options as provided by employment provision of this City or Federal or State law.
5. All City personnel on temporary transitional duty are prohibited from engaging in outside employment, in which they may reasonably be expected to perform functions for which they have been determined physically or mentally unable to perform on behalf of this City and that forms the basis for their temporary transitional duty assignment.
6. Transitional duty assignments shall not be established for disciplinary purposes.
7. Employees may not refuse temporary transitional duty assignments that are supported by and consistent with the recommendations of a City selected physician. The City may interpret failure to accept and perform transitional duty work as a resignation.
8. When an employee has reached maximum medical improvement as determined by a City selected physician, an assessment will be made regarding the employee's ability to perform regular job duties or a different job with or without a reasonable accommodation.

B. Temporary Transitional Duty Assignments

Temporary transitional duty assignments may be drawn from a range of areas that include but are not limited to the following:

- a. administrative projects (e.g. report review, special projects)
 - b. clerical functions (e.g. filing)
 - c. desk assignments (e.g. booking officer, bookkeeping)
 - d. communications (e.g. complaint taker)
 - e. inspections (e.g. sidewalks, street signs, buildings, equipment)
 - f. updating (e.g. MSDS at various locations)
 - g. painting (e.g. fire hydrants, park benches & equipment)
 - h. community relations (e.g. police community awareness visits)
1. Department Heads shall notify the Executive Safety Officer or designee of any work that may be used for temporary transitional duty.
 2. In addition to consideration included in A-1 of this policy, decisions on temporary transitional duty assignments shall be made based upon the availability of an appropriate assignment given the applicant's knowledge, skills and abilities; availability of transitional duty assignments; and the physical limitations imposed on the employee by the City selected physician.
 3. Every effort shall be made to assign employees to positions consistent with their position and pay classification. However, where appropriate, personnel may be assigned to positions within other departments and positions designated for personnel of lower position or pay classification. Employees thus assigned shall:
 - a. retain the privileges of their rank but shall answer to the supervisor of the department to which they are assigned with regard to work responsibilities and performance; and
 - b. retain the pay grade and related benefits of the position held prior to their assignment to temporary transitional duty as controlled by the employment provisions of the City of Hannibal.
 - c. for work related accidents, if the employee is not retained at the same the pay grade of the position held prior to their assignment to transitional duty, workers' compensation temporary partial disability benefits may be available.

C. For work related accidents in which the employee is not immediately released to return to normal duty the following shall apply:

1. Immediately following treatment the employee should report to his/her supervisor their condition and return to work status.
2. At the earliest possible opportunity, the Executive Safety Officer (City Clerk) will discuss the case with the physician concerning the course and scope of the treatment and the ability of the employee to perform transitional duty. The Executive Safety Officer will then discuss with the supervisor, the employee's transitional duty assignment.
3. Within the first three days following an accident the supervisor shall contact the employee and inquire as to the employee's ability to return to work.
4. If the employee has not returned to work after three days then the Executive Safety Officer or Department Head shall contact the doctor and the employee to check the employee's transitional duty status – follow up with the physician, if necessary.
5. If the employee is not able to return to work after three, days then the employee or the Department Head shall contact the Executive Safety Officer (City Clerk) to discuss the employee's transitional duty status and present the work status report provided by the treating physician, immediately following each doctor's appointment.

6. If it is determined that the employee may be medically able to perform transitional duty, the essential functions of the transitional duty shall be identified by the supervisor and reviewed with the employee.
- D. Request for and Assignment to Temporary Transitional Duty for non-work conditions
1. Requests for temporary transitional duty assignments are usually completed by the employee. However, the supervisor may complete the request as described in (D-3). Requests must be accompanied by a statement of medical certification to support the requested reassignment, which must be signed by the treating physician. The certificate must include an assessment of the nature and probable duration of the disability, prognosis for recovery, nature of work restriction and an acknowledgement by the health-care provider of familiarity with the transitional duty assignment and the fact that the employee can physically perform the duties involved.
 2. The request for temporary transitional duty and the physician's statement shall be forwarded to the City Clerk, who shall make a recommendation regarding the assignment to the Department Head.
 - a. This City may require the employee to submit to an independent medical examination by a physician of the City's choosing, other than the City's Workers' Compensation physician. In the event the opinion of the City selected physician differs from that of the foregoing health provider, the employee may request a third opinion at the employer's expense.
 - b. The employee and representatives of the City shall cooperate and act in good faith in selecting any third health-care provider, and both parties shall be bound by that medical decision.
 3. An employee who has not requested temporary transitional duty may be recommended for such assignment by submission of a request from the employee's immediate supervisor. Such a request must be accompanied by an evaluation of the employee conducted by a competent medical authority expressing the need for temporary transitional duty or by a request/order for a medical or psychological fitness-for-duty examination.
 - a. Notice shall be provided to the employee of the proposed temporary transitional duty assignment together with justification for the recommendation.

I, _____, _____
Name Department

have received a copy of the City of Hannibal Loss Prevention Policy. I have read the handbook and have been instructed to ask my supervisor to explain or answer questions I might have regarding the material contained in the handbook.

Signature

Witness

Date

Date

RETURN TO CLERK'S OFFICE

Location: Personnel File