SAFETY MANUAL

CITY OF WATERTOWN
SOUTH DAKOTA

Revised Manual 2017

Contents

INTRODUCTION

This Safety Manual for the City of Watertown applies to all employees of the City; and excludes elected officials and Watertown Municipal Utilities staff. The manual provides City employees with general safety information and guidelines. These guidelines are intended to cover routine conditions and situations. It is impractical to cover all situations and/or emergencies that someone may encounter on the job. The earnest cooperation of the employee is required in seeking assistance when dealing with unsafe conditions and unsafe practices not covered in this manual. Moreover, suggestions that may improve the general safety of city employees would be greatly appreciated. In situations where more information is desired, appropriate State and Federal Regulation may be of help. The guidelines in this manual have been developed to incorporate applicable State, Federal and local standards.

Accidents are usually caused by either unsafe acts or unsafe conditions. Thus, eliminating or minimizing these acts and conditions can prevent the majority of “accidents”. This manual was designed to inform employees of the policies and procedures to follow as a city employee. Each department may have specific rules and procedures the employee should become familiar with as well. In some cases, departmental rules may be more stringent than City policy.

Become familiar with the contents of this book and the proper procedures for operating all department equipment. Make safety a habit! Before starting any project, no matter how small, consider the **potential** hazards to all individuals, equipment or the project. On-the-job safety is the responsibility of everyone. Above all, use care and common sense in day-to-day tasks. It is important. **The life or limb you save could be your own.**

Safe work places don't just happen. It takes the effort of every employee to ensure that safe work practices are followed and safe conditions are maintained. Safety isn't just a good idea, it's the way we should do business, every one of us.
All employees are responsible for keeping themselves informed on city-wide and departmental safety procedures.

If you have safety questions or comments, please feel free to contact the Risk Manager or Finance Officer at City Hall at 882-6203.

THE PSYCHOLOGY OF SAFETY

Injuries affect the morale and threaten the emotional health of the parties involved. Injuries are expensive in terms of lost wages and medical treatment. An injured person cannot work at peak efficiency. In an excellent study, Stout (1972) investigated the cause of accidents. These findings have important implications. It was discovered that accidents occurred when experienced personnel consciously accepted risks that they should have avoided. Contributory causes to accidents were found to be (1) the conscious acceptance of an obvious and familiar risk; (2) hurrying to meet deadlines, some imaginary; (3) carelessness and fatigue; (4) mental preoccupation - - planning, worrying, daydreaming.

Accident prevention can therefore be broken down into two components, namely, knowledge factors and emotional factors. It is important to know the rules of safety. However, Stout (1972) found in his study that the injured parties knew the rules of safety. Therefore, this is not enough. The knowledge factor must be accompanied by emotional or psychological factors. The worker

must maintain a constant, cautious and attentive alertness. Concentration on the job is imperative. This attitude of safety, which encourages an awareness of hazards, can help ensure the continued health and productivity of all personnel.

RISK MANAGEMENT AND SAFETY POLICY STATEMENT

Risk Management Policy Statement

The City of Watertown establishes the following policy concerning risk management:

Risk management is a process by which risks are captured by employees, and supervisors/management and submitted up the management chain for assessment. Management of risk is a continuous process that involves identification, assessment, mitigation planning, implementation of measures to mitigate or avoid the risk, and finally monitoring the results to ensure the measures taken are having the desired impact on the risk.

The goal of risk management within the City of Watertown is the efficient minimization of potential risk relative to property, business interruption, liability, and personnel. Risk planning is the development of a strategy and methods for identifying and tracking root causes, developing mitigation plans, performing ongoing risk assessments and assigning resources. The concept of a risk is identifying a potentially detrimental condition or situation in advance, whereby if steps are not taken to reduce or mitigate the risk, the consequences could range from minor to severe.

“Risk” shall be a primary consideration in the planning, execution and operation of all local government services and activities. All employees shall take proactive steps to identify potential hazards that create risk in their respective work divisions, and report such hazards to his/her immediate supervisor. Employees shall make recommendations for mitigating identified hazards that impose risk. The City of Watertown is committed to providing a safe, effective, and fiscally efficient service base for the community and shall reduce the potential for mishaps, loss and liability through the application of sound risk management practices.

Authority and Responsibility

All employees are expected to act responsibly in the conduct of their duties and shall be required to participate in the City’s risk management and safety programs. The City’s Risk Manager is responsible for the basic administration of the risk management program.

Safety Policy Statement

The City of Watertown will attempt to provide the safest possible working conditions for employees. Safety will be given primary importance in planning and operating City activities in order to protect City of Watertown employees against occupational injuries and illnesses, and to protect the City against unnecessary financial burden and reduced efficiency. Each employee is responsible for the safety, wellbeing, and safe work conduct of themselves and those that report to or are assigned to him/her.

Employees of the City of Watertown are considered valuable assets; their safety is important. Recognizing the need and responsibility for safety, the City considers accident prevention and safe working conditions integral to the efficiency and operations of the City. To this purpose, a Safety Committee was formed to work in conjunction with the City Risk Manager to implement

the City's Safety Program. Copies of this Safety Manual are available in the human resources office, individual departments and on our website at www.watertownsd.us.

RISK MANAGEMENT/SAFETY PROGRAM

The City of Watertown, with the participation of its various departments, has formed a Safety Committee whose purpose is to implement a risk management program. The committee is composed of several members; each of the city's unions shall be represented on this committee. In those departments that do not include union employees, the department head may appoint the committee member. The responsibilities and duties of all committee members, employees, department heads, the Risk Manager, and the City as an employer are found in this manual.

The recommended term of appointment for each appointed member is two (2) years. Safety Committee members may serve more than one term. Participation at Safety Committee meetings is essential to the success of the program. Therefore, if the appointed member is unable to attend an alternate representative should attend. *To the extent practically possible, department heads are encouraged to appoint new members to the Safety Committee.* Employees being replaced on the Safety Committee are encouraged to provide their replacement member with relevant information about the nature and extent of their duties.

Responsibilities and Roles in the Risk Management/Safety Program:

Responsibilities of Safety Committee members:

:

A. Devote a portion of each safety meeting to safety education.
B. Develop and update the Safety Manual or manuals.
C. Listen to reports from other representatives on what is being done in their areas.
D. Help each other with ideas for programs.
E. Discuss problems and create corrective procedures.

Components of the Risk Management/Safety Program:

1) Department Head-- Each Department Head is responsible for maintaining a safe working environment for employees and to ensure that the needs of the general public are met.

2) Employee--Each employee is required to follow safety regulations and identify situations that may cause harm to themselves, other employees, or the general public.

3) Risk Manager, or designee, and the Safety Committee of the City of Watertown. It is the duty of these committees to ensure city-wide compliance with rules and regulations contained in this manual.

4) Risk Management Manual. Maintenance and inspection of all equipment, facilities, and operations of the City must be performed in compliance with the Safety Manual.

All written departmental safety policies supersede this Risk Management and Safety Policy Statement and this Safety Manual unless the requirements are less stringent than the Safety Manual. The Safety Committee will have an overriding option to overrule a departmental policy or procedure if they feel that the departmental Safety Policies are unsafe.

Responsibilities of the Employee:

The following safe practices, job procedures and the wearing of prescribed personal protective equipment are job requirements.

Each Employee shall:

A. Follow job instructions; never take shortcuts at the expense of safety.
B. Use personal protective equipment that is prescribed and available.
C. Notify supervisor as soon as possible following an accident or injury.
D. Keep tools in good condition and use them properly. Defective tools and equipment shall immediately be reported to the supervisor and not be used.
E. Lift and carry materials with care, using proper lifting techniques.
F. Use caution and follow instructions on warning labels of hazardous materials.
G. Keep work areas clean.
H. Walk, never run on premises.
I. Know fire exits and respond immediately to the evacuation signal.
J. Keep all machine guards in place.
K. Report all unsafe conditions in writing to their immediate supervisor (See Attachment I). If the employee does not receive a written response within 24 hours from the supervisor with possible corrective action, the employee may contact the Risk Manager to report the possible unsafe condition. The Risk Manager will investigate and shall submit a written recommendation back to the employee, supervisor or department head.
L. If injured, fill out first report of injury immediately as specified in Part 5 below.
M. After consulting your supervisor, the employee has the right to contact the Risk Manager for immediate investigation before they continue to work, if they feel that the work they are doing may endanger himself or herself or a fellow employee.
N. Notify your supervisor as soon as possible following an accident or injury.

Responsibilities of the Department Head / Supervisor:

Each Supervisor shall:

A. Investigate accidents, assist in the completion the First Report of Injury form and submit the report to the Finance Office as per Part 5 below.
B. Coordinate monthly safety meetings.
C. Coordinate with Risk Manager or Safety designee to conduct (or delegate responsibility for) safety meetings. Keep a log of all meetings, including what was discussed and who was present.
D. Cooperate with Risk Manager to create and maintain a safe working environment.
E. Be responsible for ensuring the completion of monthly safety inspections of buildings and vehicles and submitting completed reports to the Safety designee.
F. Require wearing of safety equipment that is provided and enforce rules regarding the use of protective equipment.
G. Be open to safety suggestions of subordinates.
H. Promote safety by example.
I Obtain medical aid for ill or injured employees if necessary and ensure first aid kits are readily available.
J. Not take shortcuts at the expense of safety.
K. Provide and maintain necessary equipment for tasks as budgets allow.

L. Take immediate action to correct unsafe conditions of tools and equipment.
M. Implement the City of Watertown Safety Manual.
N. Develop specific departmental safety procedures as needed.
O. Respond in writing within 24 hours to an employee's safety concern. The department head must submit in writing a report to the Risk Manager stating his potential corrective actions.
P. Develop an employee orientation checklist. New **and temporary staff** shall be trained on the items on the checklist and sign off at the completion of the training.
Q. Inform all departmental employees of the requirements set forth in this manual.

Responsibilities of Risk Manager:

(References made to Risk Manager shall be understood to Indicate Risk Manager or Safety Designee)

Risk Manager shall:

A. Conduct work site safety inspections biannually.
B. Make recommendations to department heads and supervisors on equipment needed and educational programs.
C. Coordinate with the supervisor to conduct monthly safety meetings with employees.
D. Attend safety meetings periodically.
E. Conduct quarterly Safety Committee meetings.
F. Promote safety awareness.
G. Develop appropriate safety forms and records. Keep incident file records and safety meeting records and periodically prepare reports for the Safety Committee on progress that has been made in the Safety Program.
H. Chair the Safety Committee.
I. Make arrangements for training and special classes; i.e: a healthy back, defensive driving, CPR, etc.
J. Assist the representatives in getting ideas and materials for their meetings.
K. Write proposed policy directives and organize subcommittees for special projects.
L. Respond within 12 hours after the department head or employee has made notification of a possible safety concern (See Attachment I).
M. Pass on safety concerns to the Safety Committee.

Responsibilities of the Employer:

Employer shall:

A. Support the Safety Program and encourage cooperation.
B. Give a fair evaluation and consideration of suggestions made by the Safety Committee.
C. Budget for and purchase needed safety equipment when possible.
D. Encourage safety training programs.
E. Promote safety awareness; encourage positive attitudes and leading as an example.
F. Endeavor to provide and promote a safe and healthy workplace.

PART 1: THE INSPECTION PROGRAM

The purpose of work-site inspections is to identify potential unsafe practices and conditions which can be eliminated and thus reduce the risk of accidents. Inspections by the Risk Manager *shall supplement the continuous monthly self-inspections conducted by each department***.** The Risk Manager will complete a bi-annual inspection of each department. An employee from each department and the Risk Manager will conduct the bi-annual inspections. The inspection consists of using a checklist and any previous checklists or reports to monitor progress and address safety concerns. The Risk Manager's goal is to offer helpful suggestions on ways to create a safer working environment. The purpose is not to find fault or blame, except in cases of continued negligence or apathy. Inspections made by insurance companies, fire departments and building inspectors will also aid in recognizing potential hazards. When the inspection process has been completed, the results of the inspection will be forwarded to the department head or supervisor. The department head or supervisor shall make corrections or comment on the recommendations of the inspection. The completed inspection form(s) will be returned to the Risk Manager within 30 days.

PART 2: SAFETY MEETINGS / REQUIRED TRAININGS

Safety meetings are often called tailgate or toolbox meetings due to their informal nature*. All departments shall have a minimum of one safety meeting each month.* Employees are encouraged to take turns conducting the meetings, coming up with fresh ideas for topics on which to be trained. An extensive video library is available for safety meetings through Safety Benefits Inc. and various other resources throughout the City.

Each department is required to have the following subject matter covered in a monthly Safety Meeting at the frequency noted:

- **Defensive Driving Course** - every 3 years (this is offered in a classroom setting).
- **Safe Driving Techniques** – every other year.
- **Fire Extinguisher Use** – every 2 years (contact the Fire Department to schedule this).
- **Proper Lifting / Back Injury Prevention** –every year.
- **Slips, Trips and Fall Prevention** –every year.
- **Harassment Prevention Training** –every year (classroom every other year).

A log of each meeting is to be kept by the supervisor and a copy sent to the Risk Manager following the monthly safety meeting. Employees shall sign the training log sheet at the completion of the training session. This training log is checked during on-site inspections. Safety meetings teach new ideas, remind us of the things we already know, and increase ongoing safety awareness.

PART 3: SUPERVISING OTHERS

Whether or not you are a supervisor, there are times when you train or supervise new staff members, particularly temporary employees. Remember to convey a positive attitude towards safety. Instruct them carefully in the safety procedures needed to complete their individual jobs. New employees are eager to please and sometimes refrain from asking questions. *Each department shall develop an employee orientation checklist. New and temporary staff shall be trained on the items on the checklist and sign off at the completion of the orientation training.*

PART 4: DISCIPLINARY ACTION

The most important purpose of this manual is to protect the health and lives of workers. Failure of any employee to follow the City safety procedures, departmental safety procedures or law will not be tolerated. Therefore, failure to follow City safety procedures or department guidelines may be cause for disciplinary action. The following actions may negatively impact employee evaluations and could result in disciplinary action:

- Failure, by an employee, to report all accidents/incidents within three working days of the accident/incident.
- Failure of a supervisor or management employee to investigate a reported accident or hazard within three working days of the accident/incident.
- Failure of a supervisor or management employee to implement Safety Committee recommendations in a timely fashion.

PART 5: INJURY ON DUTY / RETURN TO WORK

If an employee is injured on the job, the injury must be reported to the supervisor immediately.

- Medical treatment of an injured employee is the primary concern in any accident situation.
- Supervisors will first secure medical aid if needed, and then fully investigate the accident or injury.
- The HR Coordinator/Risk Manager must be notified either by email, or phone of the injury when the injury happens.
- A First Report of Injury form must be filled out immediately to comply with regulations of notification and submitted to the HR Coordinator/Risk Manager in the Finance office.
- If the employee seeks treatment for the injury, a medical report form from the treating physician must be provided to his/her supervisor prior to his/her return to work. This medical report form must indicate what physical restrictions the employee has, if any, and the duration of the restricted work duty.
- Supervisors are not to accept return to work slips that are not specific as to the length of time an employee is released from work.
- Should the employee not be allowed to work, and taken off their assigned duties by a medical provider for one day or more, the Finance Office shall be notified immediately. *Accordingly, in the event an employee is injured and unable to return to work, a written work release from a treating physician shall be supplied to the immediate supervisor prior to allowing the employee to return to performing his/her permanently assigned work duties.*
- In all cases where an employee has temporarily been released from work, it will be the responsibility of the individual to provide the City with appropriate "return to work documentation" from the treating physician indicating they are able to return to work without restrictions. *Under no circumstances shall a supervisor allow an employee to return to work without first securing this documentation.*
- Once the department head has reviewed this documentation and has noted the restrictions for duty or release to return to full duty, the department head shall turn in the original documentation to the Human Resources Coordinator as any and all medical information must be retained under separate, secure files.

PART 6: INCIDENT / ACCIDENT INVESTIGATION

The key to preventing accidents and the associated personal and economic losses is to understand their root causes. The City of Watertown will track in a database the incidents/accidents occurring on the job and initiate action or training as needed. This benefits the City of Watertown, our employees and the public. An incident/accident does not necessarily result in injury or property damage. Therefore, one goal of an accident investigation is to prevent a recurrence. An investigation into an incident is not an attempt to place blame, to prove a point, discredit an individual, or to further a hidden agenda. The investigation seeks only to ascertain the causes of an accident and to suggest ways to eliminate the problem.

Every City of Watertown employee is responsible for reporting accidents as soon as possible. Every accident, regardless of the outcome, shall be reported in accordance with the following guidelines:

NEAR MISSES:
Employees may report near misses in writing to their supervisor. Remember that a near miss represents an opportunity to identify a hazard without the pain of someone getting injured. Near miss reporting is crucial to the success of our accident prevention efforts and our safety program.

FIRST AID INJURIES/ MEDICAL TREATMENT INJURIES:
For minor or major injuries, fill out the First Report of Injury form and turn in to your supervisor. We need to track even minor cuts and scrapes carefully in case they turn into more serious cases later, and to help identify potential hazards.

PROPERTY DAMAGE:
If you are involved in an accident that causes any property damage or vehicle damage, notify your supervisor as soon as possible. An Auto, Liability and Physical Damage Report should be completed for these situations.

Immediate Supervisors will initiate the accident investigation process after securing proper medical attention for the personnel involved. They will secure the accident scene if necessary and interview those involved to establish the facts of the incident. Remember, everyone's participation in this stage of the investigation is crucial to finding and assisting in eliminating the causes of the accident.

The Risk Manager and any other applicable sources will review the facts of the event and make recommendations for corrective action. Injured or involved parties are encouraged to participate in the review if they desire.

It is important to remember that not every accident investigated will result in major changes to our system. As we continually strive to improve all aspects of our work processes, the safety personnel and management will track accident / incident causes and determine the best options for eliminating hazards.

PART 7: GENERAL SAFETY

HOUSEKEEPING

- Work areas shall be clean and orderly.
- Spills must be cleaned up immediately or marked and cordoned off until the situation is remedied.
- All combustible scrap, debris and waste must be stored safely and removed promptly.
- Aisles, passageways, doorways, stairs and walking surfaces shall be kept free from refuse, slippery and wet substances, misplaced equipment and trip hazards.
- Washrooms, locker rooms, lunchrooms and toilet facilities shall be maintained in a clean and orderly manner.
- Waste should be disposed of in proper receptacles.
- Tools, supplies and equipment shall be properly returned, stored and kept in order.
- *Flammable liquids* should be kept in approved, properly marked containers and stored in an approved flammable storage cabinet.
- *Gasoline* shall be stored in approved safety gas cans.
- *Unidentifiable chemicals* shall be disposed of at the annual City hazardous material collection event.
- Extension cords shall not be used in oil or water and shall be inspected for worn insulation and exposed strands of wire before use.
- Extension cords that cross a traffic area must be covered by a raceway.
- Protruding nails and broken glass are dangerous. Remove or bend down nails in lumber or containers and pick up all broken glass.
- *Any product in an unlabeled container* should be disposed of in the proper manner. (Contact the Fire Department for specific methods of disposal.)
- Make sure all pits and floor openings are either covered or otherwise guarded. Oily and paint-soaked rags are combustible and shall be stored in metal containers only.

OFFICE SAFETY RULES

- Furniture shall be adjustable, positioned and arranged to minimize strain on parts of the body.
- The glare of a computer screen will be minimized by the use of a glare screen if needed to prevent eyestrain.
- Do not open two or more file cabinet drawers at one time.
- Store supplies inside cabinets and heavy items on lower shelves.
- All chair legs shall remain on the floor at all times.
- Watch fingers when using paper cutter; keep cutter closed when it is not used.

FIRE PROTECTION

All fire doors and shutters must be maintained in good operating condition. Fire doors and shutters shall be unobstructed and protected against obstructions. Fire doors and shutter fusible links must be in place.

All automatic sprinkler water control valves, if any, air and water pressures should be checked routinely. All automatic sprinkler systems shall be inspected and tested annually by a sprinkler company according to NFPA 25 standards. Maintenance of automatic sprinkler

systems shall be completed on a regular basis by a person fully trained in the maintenance of such systems. Metal guards shall protect sprinkler heads if they could possibly be exposed to damage. Adequate clearance must be maintained below sprinkler heads.

A suitable fire extinguisher shall be located in buildings and be hung in a well-marked location within the 50 to 75 feet minimum requirement. Fire extinguishers shall be maintained in fully operational condition and be correctly labeled. A certified professional (National Fire Protection) shall inspect fire extinguishers once a year. Fire extinguishers shall carry a durable inspection and recharge date tag. *Fire extinguishers shall be inspected monthly; the initials and date of inspection shall be placed on the back of the extinguisher inspection tag.*

BUILDINGS

Building safety is a topic which encompasses many areas. Buildings, which are occupied by city employees, shall be inspected by the Risk Manager and the Fire Department. Structures shall comply with the Uniform Building Code, City ordinances and any other applicable building codes.

Each department's *monthly self-inspections of buildings shall identify potential safety concerns.* Structures and building grounds shall be free of debris and kept in an organized manner. Exits shall be clearly marked and unobstructed. Mechanical equipment rooms containing boilers, blowers, compressors, filters, and electrical equipment rooms shall be separated from other areas of a building by walls and doors. To maintain the integrity of these separations, the fire doors shall never be left open. Fan rooms house ventilation equipment that often includes automatic shut down and dampers activated by interlocking with the building smoke and fire detectors. Fire dampers and other automatic shutdown provisions will not be disabled without Fire Department approval (except for temporary maintenance procedures).

Elevators and chair lifts shall be professionally inspected yearly. The health hazards of smoking, both direct and second-hand smoke, are well established; therefore, *the City of Watertown buildings and vehicles are NO Smoking Areas.*

PART 8: PROPER LIFTING AND CARRYING PROCEDURES

Manual lifting and handling of material must be done by methods that ensure the safety of both the employee and the material. The following are guidelines for manual lifting:

- Know your limitations. Never attempt to handle anything beyond your capabilities.
- Inspect the load to be lifted for sharp edges, slivers, and wet or greasy spots. Wear gloves as needed when lifting or handling objects with sharp or splintered edges. Gloves must be free of oil, grease, or other agents that may cause a poor grip or slippage.
- Be sure your destination is free of obstructions or spillage that could cause tripping or slipping.
- Consider the distance the load is to be carried. Recognize the fact that your gripping power may weaken over long distances. Size up the load and make a preliminary "heft" to be sure the load is easily within your lifting capacity. If it is not, get help. If team lifting is required, personnel should be similar in size and physique. One person should act as leader and give the commands to lift, lower, etc. Two people carrying a

long piece of pipe or lumber should carry it on the same shoulder and walk in step. Shoulder pads should be used to prevent cutting shoulders and help reduce fatigue.

- To lift an object off the ground, the following are manual lifting steps:

    1. Make sure you have good footing and set your feet about 10 to 15 inches apart. It may help to set one foot forward of the other.
    2. Assume a knee-bend or squatting position, keeping your back straight and upright.
    3. Get a firm grip and lift the object by straightening your knees – not your back.
    4. Carry the load close to your body (not on extended arms). To turn or change your position, shift your feet, don't twist your back.

Note: The steps for setting an object on the ground are the same as above, but in reverse.

PART 9: POWER LOCKOUT / TAGOUT PROCEDURE

When taking a machine out of service for maintenance work, take the following precautions to protect yourself and your co-workers from injury:

- Alert affected personnel that power is being disconnected.
- A tag or tags shall be placed at the closest point of power disconnect where lockout is required by each person(s) performing work.
- Before starting the work, the person(s) performing the work shall make sure the power is disconnected (and any hazardous residual pressure shall be relieved) prior to and during such work.
- Any equipment component that needs blocking to prevent its movement by gravity or other means must be blocked before repair(s) are initiated.
- Before work is started, equipment shall be tested to insure the power is off and any hazardous residual pressure is relieved.
- When a machine does not have a lockable disconnect switch and is connected to an electrical source by a plug-in cord, it shall be disconnected from the electrical source and properly tagged.
- If it is necessary for work on a machine or installation to be continued by the next shift personnel, the tags or padlock(s) of the original employees shall be removed by those employees in the presence of the oncoming shift who will immediately insert their own tags or padlock(s) into the disconnect.

When placing a machine back into service, take the following precautions to protect yourself and your co-workers from injury:

- Replace all guarding before removing tag (s).
- Alert affected personnel that the power is being energized to the machine.
- Assure that all crews are clear before removing the lock or tag.
- Remove the tag or padlock.
- No one other than the employee or supervisor of that employee, placing tags or padlocks on the power lockout shall remove tags or padlock(s). If a supervisor removes the tags or padlock(s), they shall do so in the presence of the employee who originally placed the tags or padlocks if the employee is available. In the absence of said employee, the supervisor shall notify all affected personnel that the equipment will be energized.
- Energize the machine.

ELECTRICAL SAFETY

One of the biggest questions to be addressed regarding safety processes is who does what. There is one rule that perhaps makes the most sense in answering this question. IF YOU ARE NOT SURE OF CORRECT TROUBLESHOOTING PROCEDURES OR DON'T FEEL COMFORTABLE WITH THE TASK AT HAND, CONTACT SUPERVISORY PERSONNEL FOR ASSISTANCE.

As your experience level increases on different electrical systems, time will make you more comfortable with routine tasks. Be patient and remember that SAFETY is the top priority.

Responsibilities can vary from task to task. Listed below are some "suggested" areas of electrical tasks that "could" be performed and "should not" be performed by City personnel. Discussion within the department should verify correctness of this list. Personnel shall be aware of changes made to this list and of exactly what they are expected to do and not to do when dealing with electrical problems.

ELECTRICAL TASKS THAT COULD BE PERFORMED BY CITY PERSONNEL

1. Test for the presence of voltage in disconnect boxes and other electrical equipment.
2. Measure resistance / continuity of electrical components in a "Zero Energy State."
3. Measure amp draw of electrical equipment when operating.
4. Reset over-current protective devices when faults are cleared from a circuit.
5. Check motors with an ohmmeter to determine if opened or short-circuited windings are found.
6. Replace equipment such as fuses, relays and switch devices when they are determined to be defective.
7. Replace motors, lamps, and other load device when in a "Zero Energy State."
8. Replace printed circuit cards when found to be defective.

ELECTRICAL TASKS THAT ***SHOULD NOT*** BE PERFORMED BY CITY PERSONNEL

1. Modify electrical components or safety devices.
2. Electrical construction of any kind. *
3. Sizeover-current protective devices.
4. Replace wiring that has been deemed non-serviceable.
5. Replace 480-volt circuit breakers unless certified to do so (Airport).
6. Adjust values of over-current protective devices.
7. Work on live voltages in excess of 480 volts unless certified to do so (Airport).

* It should be understood that the definition of "electrical construction" means designing and installing new equipment such as, but not limited to, new disconnects, conduit runs, over-current protective devices and other equipment where improper installation or design characteristics could result in an injury, fatality, or loss of property.

PART 10: SAFE VEHICLE OPERATIONS

Motor vehicle operation represents one of the largest liability exposures to the City. Safe driving practices protect the employee, fellow employees and citizens of the community. The employee, fellow employees and citizens of the community may be affected anytime if an employee operates a private or public vehicle to conduct City business.

These practices will ensure that employees meet an acceptable standard of performance and safety while operating their private or public vehicles to conduct City business. Whenever the provisions of these practices are in conflict with the South Dakota Code or collective bargaining agreements, provisions of the South Dakota Code or collective bargaining agreement will prevail.

The following applies to employees who operate a motor vehicle while on City time:

- Personal vehicles may be used for official City business with prior approval.

- All City employees must be 18 years of age to drive any motorized vehicle as part of their job duties for the City (this includes but is not limited to lawn mowers, cars, trucks etc.)

- All employees whose duties require the operation of a City-owned motor vehicle or who operate a privately owned motor vehicle while conducting public entity business as a part of their employment must possess a valid state driver's license of the appropriate type.

- Any employee performing work, which requires the operation of a City vehicle or private vehicle on City business is required to report to the employee's supervisor if his or her license is allowed to expire, is suspended or revoked. Any employee who fails to report such information is subject to disciplinary action in accordance with City policy.

- Sworn police officers, Fire Department personnel (excluding administrative assistant), position(s) and employees required to hold Commercial Driver's licenses shall submit to a pre-employment motor vehicle record (MVR) review The City reserves the right to obtain MVR's on any employee.

- Employees operating City-owned vehicles or privately owned vehicles while conducting official City business shall observe all traffic laws, rules and regulations, in addition to using common sense and good judgment.

- Any employee who regularly operates a privately owned vehicle to conduct city business is required to maintain automobile liability insurance coverage on their privately owned vehicle at the State of South Dakota minimum levels.

PART 10: SAFE VEHICLE OPERATIONS--CONTINUED

- Only authorized personnel may operate City vehicles.
- All drivers and passengers using City vehicles, equipment or personal vehicles will wear seat belts, when available.
- Vehicles will be maintained in safe and operable condition.
- Departments shall perform monthly visual inspections of lights, brakes, horns, turn signals, and tires.
- Operators shall report all unsafe or defective equipment they observe in writing to supervisors.
- City vehicles shall be refueled only when the engine is off.
- City vehicles will be parked with the motor stopped and key removed whenever possible.
- Slow-moving vehicles shall be equipped with the appropriate signs.
- Not more than three persons shall ride in the front seat of any vehicle.
- No person shall ride on any portion of a motor grader, tractor, or similar equipment except as the driver, operator or trainer.
- No person shall ride in the bed or box of a truck.
- Drivers shall not permit vehicles to be loaded beyond the capacity of the unit.
- Equipment and tools carried on or in a vehicle should be placed securely in compartments or fastened down.
- Drivers shall be particularly cautious when driving near pedestrians.
- Children shall be kept from playing on or around City-owned vehicles and/or equipment.
- When moving vehicles into, out of, or near buildings, such movement should be done slowly and with caution.
- Employees shall not jump on or off vehicles while in motion.

BACKING OPERATIONS:

- ✓ Backing should be avoided unless absolutely necessary.
- ✓ Backing should be done only after the driver has made certain their vehicle has adequate clearance on all sides.
- ✓ Backing should be done very slowly and with extreme caution.
- ✓ Both sides should also be observed during backing operations.
- ✓ Where possible, backing should be done with the use of a signalman.

Cell Phone Use While Driving:

- Employees whose job responsibilities include regular or occasional driving are expected to refrain from using their phone while driving.

- Safety must come before all other concerns.

- Regardless of the circumstances, including slow or stopped traffic, employees are strongly encouraged to pull off to the side of the road and safely stop the vehicle before placing or accepting a call. If acceptance of a call is unavoidable and pulling over is not an option, employees are expected to keep the call short, use hands-free options if available, refrain from discussion of complicated or emotional discussions and keep their eyes on the road.

- Special care should be taken in situations where there is traffic, inclement weather or the employee is driving in an unfamiliar area. Under no circumstances are employees allowed to place themselves at risk to fulfill business needs.

- **Texting while driving is prohibited.**

- Employees who are charged with traffic violations resulting from the use of their cell phone while driving will be solely responsible for all liabilities that result from such actions.

COMMERCIAL DRIVERS LICENSE

Employees who are required to carry a Commercial Driver's License as a condition of employment are subject to the governing provisions of SDCL 32-12A.http://sdlegislature.gov/Statutes/Codified_Laws/DisplayStatute.aspx?Type=Statute&Statute=32-12A

Employees required to hold a commercial driver's license to perform their job, are prohibited from the following while operating a CDL vehicle to perform City functions:

- Using cell phone while driving, unless a one button operation is utilized.
- Texting while driving.

PART 11: PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment will be maintained in sanitary and effective condition. Personal protective equipment, which is provided by the City, shall be used when there is a hazard in the working environment which could cause injury or illness.

RESPIRATORS

For jobs involving exposure to harmful fumes, gases, mists, or chemical dusts or lack of sufficient oxygen, proper respiratory protection shall be used. Supervisors should instruct employees whose work assignments involve the use of respiratory protection, about the potential hazards they are exposed to and how to use the proper personal protective respiratory equipment.

HEAD PROTECTION

ANSI approved hard hats should be kept in good repair, properly adjusted and worn only by the individual to whom they are assigned except in an emergency. Hard hats should be used in any operation where hazards exist. Remember that all it takes is a carelessly dropped tool or piece of material coming down on your head to cause severe injury or even death. There are a number of workers disabled with various type of head injuries and vision problems because they didn't wear a hardhat. When you wear a hardhat, wear it correctly. Keep it squarely on your head with the inside band properly adjusted. Do not wear a hard hat backwards or over a stocking cap.

HEARING PROTECTION

Noise levels that need to be measured will be done with a sound level meter or an octave bank analyzer that is available from Safety Benefits, Inc. ANSI approved hearing protection (noise attenuating devices) will be available and used by employees when working in areas where continuous noise levels exceed 85 db (decibels). A good rule of thumb is "if it's too noisy to hear a normal conversation, it's loud enough to need hearing protection." To be effective, ear protectors must be properly fitted and employees will be instructed in their use and care. Individual departments will identify potential areas needing hearing protection, and take corrective measures on a case-by-case basis.

PROTECTIVE CLOTHING / EQUIPMENT

Employees must wear protective goggles, glasses and/or face shields, if there is a danger of injury from flying debris or corrosive materials. Employees are required to wear ANSI approved safety glasses in areas where there is a risk of eye injuries such as punctures, contusions or burns. Employees are required to wear protective gloves, aprons, shields and other means provided in areas where they may be subject to cuts, corrosive liquids and/or harmful chemicals. Hard hats must be worn in areas subject to falling objects, and at all times while at construction sites. When necessary, employees must use the approved respirators that are provided for regular and emergency use. All safety equipment must be maintained in sanitary condition and ready for use. Report any defective equipment immediately to your supervisor. Employees working on or near public roadways shall wear brightly colored safety vests or clothing. Protective gloves, clothing, and face protection shall be worn while handling caustic or dangerous chemicals, while welding, handling batteries, and while changing mercury vapor lights. For outdoor work in winter weather, layers of loose, warm, and fairly lightweight clothing

is recommended. During the months of warm weather, each department head may decide what appropriate attire for their different job descriptions is. Tube tops or sandals are not permitted. Employees must always wear a shirt. First-aid kits and contents are to be maintained in a serviceable and usable condition. The commercial or cabinet-type kits do not require all items to be individually wrapped and sealed, but only those which must be kept sterile. Items such as scissors, tweezers, tubes of ointments with caps, or rolls of adhesive tape need not be individually wrapped, sealed, or disposed of after a single use or application. Where the eyes of any person may be exposed to injurious chemicals and/or materials, suitable facilities for quick drenching or flushing of the eyes shall be provided within the work area. Flushing of the eyes requires flushing both eyes at the same time for 15 minutes with ***lukewarm*** water.

PART 12: MOTORIZED EQUIPMENT AND POWER TOOLS

MACHINE GUARDING

There will be a monthly safety inspection of machinery and equipment. All machinery and equipment must be kept clean and properly maintained. There must be sufficient clearance provided around and between machines to allow for safe operations, set up, servicing, material handling and waste removal. All equipment and machinery should be securely placed and anchored when necessary, to prevent tipping or other movement that could result in injury. One or more methods of machine guarding shall be provided on machines to protect from hazards created by points of operation, rotating parts, or flying chips or sparks. Machine guards shall not be altered or removed except for repair. Machines shall not be left running unattended. There must be a power shut-off switch within reach of the operator's position at each machine. Electrical power to each machine shall be capable of being locked out for maintenance, repair or security. Foot-operated switches shall be guarded and/or arranged to prevent accidental actuation by personnel. Manually operated valves and switches controlling the operation of equipment and machines must be readily accessible. Pulleys and belts, which are within 7 feet of the floor or working level, shall be properly guarded. Moving chains and gears must be properly guarded. The machinery guards must be secured and arranged so they do not present a hazard. Machines should be constructed so as to be free from excessive vibration when the proper sized tool is mounted and run at full speed. If the machinery is cleaned with compressed air, the air must be pressure controlled and personal protective equipment or other safeguards used to protect operators and other workers from eye and bodily injury. Fan blades should be protected by a guard having openings no larger than 1/2 inch when operating within 7 feet of the floor. Defective tools or equipment shall be immediately reported to the supervisor and not be used. It is your responsibility as operator of any machine to ensure the necessary safety precautions are taken before using the machine.

ABRASIVE WHEEL EQUIPMENT

The rest used should be kept adjusted to within 1/8 inch of the wheel. The tongue guard should be adjusted to within ¼ inch of the wheel. The side guards should cover the spindle, nut and flange and 75 percent of the wheel diameter. All protection guards shall be in place and in good repair. Bench and pedestal grinders should be permanently mounted to avoid any moving or creeping. Safety goggles or a face shield shall be used when grinding or when in close proximity to grinding operations. The maximum RPM rating of each abrasive wheel should be compatible with the RPM rating of the grinder motor. Wheels shall be allowed to develop full operating speed for at least one minute after installation before use. Work shall be applied gradually to a cold wheel to reduce chances of breakage. Grinder bearings shall be kept properly oiled. Grinding wheels shall be examined monthly for possible cracks or damage.

Each grinder should have an individual on and off control switch. The on / off switch should be easily accessible anytime you operate the machine. Each electrically operated grinder shall be effectively grounded. Do not defeat the grounding mechanism, especially by using non-three prong plug adapters. Visually inspect and test new abrasive wheels. The work area around a grinder must be kept clean at all times.

AIR / JACK HAMMERS

Areas of operation should be cordoned off from public access. Air tools and machinery shall be operated in a manner to avoid endangering personnel or property from flying material. Air hoses and connections shall be inspected monthly and before each use. The operator shall wear eye and hearing protection and any other proper personal protective equipment as needed.

WOODWORKING MACHINERY

Inspect the woodworking tool before each use. Woodworking machines, except portable or mobile ones, should be securely fastened to the floor or suitable foundation. Cutting edges on tools should be kept sharp, properly adjusted, and firmly secure at all times. Inspect the material to be cut for obstructions that could cause possible injuries. Keep electrical cords and hands clear of cutting edges. Never place your hand behind the saw as a kick back could cause severe injury. Never place your hand across the saw line while cross cutting or ripping. Never use a circular saw in the inverted position in a vise. Unplug and test before attempting any service work. Before setting a tool down make sure that the retracting guards have returned to their original position. Only designated personnel should do sharpening of blades or cutters. Protection guards shall be in place and in good repair. Support large panels before cutting; this may prevent possible bodily injury. Use two people if necessary. Safety glasses shall be worn to protect the eyes from wood chips and dust. Dust masks and hearing protection shall be worn as needed. Avoid loose clothing when operating equipment. Saws used for ripping must be installed with anti-kickback devices or spreaders. Radial arm saws must be arranged so that the cutting head will gently return to the back of the table when released. The front legs can be raised slightly or a spring device and weight used. The radial arm saw blade should not extend past the front edge of the cutting table.

MOWERS & LINE TRIMMERS

Safety glasses or other eye protection shall be worn. Mowers shall be examined before use for condition of blades, gears, and for leaks. Mowers shall be equipped with discharge chute guards and rear flap guards. The guards and any other safety devices should not be disabled. Areas to be mowed shall be inspected for wires, sticks, and miscellaneous objects, which shall be removed before mowing. Mowers shall be refueled only with the engine off and cooled. In starting a mower, keep hands and feet clear of moving parts. The mower operator shall warn bystanders of the potential danger of flying objects. Mowers shall not be left unattended with the engine running. Operators should wear proper shoes and no loose clothing. A hand mower should be steered across slopes, never up and down. A riding mower should be driven up and down slopes, not across. Always consider terrain and manufacturer's instructions. Engine or safety cutout switches shall not be bypassed.

CHAIN SAWS

The operator shall wear eye and hearing protection and any other proper personal protective equipment, such as a hard hat, face shield and chaps. Operators shall inspect the condition of the bar, guards, chain, and muffler before using the chain saw. Chain saws shall be maintained in a sharp and well-lubricated condition. Refueling should be done in an area free of flammable materials with the engine off and cooled. Wood to be cut should be visually examined for nails and hazardous objects.
Cutting should be done at an angle rather than directly overhead. Chain saws shall be held with both hands during use.

HAND TOOLS

The City of Watertown provides hand and powered portable tools that meet accepted safety standards. A damaged or malfunctioning tool must not be used, it must be turned in for servicing and a tool in good condition obtained to complete the job. Employees must use the correct tool for the work to be performed; if they are unfamiliar with the operation of the tool, they must request instruction from their supervisor before starting the job. Supervisors are responsible for ensuring that their staff are properly trained in the operation of any tool that they are expected to operate. An employee is not permitted to use a power-actuated tool unless instructed and trained as per the manufacturer's recommendations. Hand tools shall be maintained in good condition. Wrenches, including adjustable channel locks, vise grips, pipe wrenches, and socket wrenches shall be inspected for their condition and be properly disposed of when the tool is no longer functional. Impact tools such as drift pins, wedges, and chisels shall be kept free of mushroomed heads. The wooden handles of tools shall be kept free of splinters and cracked handles replaced before use. Hand and power tools shall be stored in the proper manner.

LADDERS

Ladders must be in good condition, made of suitable material, of proper length and of the correct type for the use intended. Ladders shall be inspected before use for warping, cracks, loose rungs, sharp projections and general condition. Damaged ladders must never be used; they should be repaired or destroyed. Ladders used near electrical equipment must be made of a non-conducting material. Stored ladders must be easily accessible for inspection and service, kept out of the weather and away from excessive heat, and well supported when stored horizontally. A portable ladder must not be used in a horizontal position as a platform or runway or by more than one person at a time. A portable ladder must not be placed in front of doors that open toward the ladder or on boxes, barrels, or other unstable bases. Ladders must not be used as braces or skids. The height of a stepladder should be sufficient to reach the workstation without using the top or next to the top step. A stepladder should be held by at least one employee when another employee is working 10 feet or more above the ground surface. Stepladder legs shall be fully spread when the ladder is in use. Bracing on the back legs of stepladders must not be used for climbing. The proper angle for a portable straight ladder can be obtained by placing the base of the ladder a distance from the vertical wall equal to one quarter of the vertical distance from base to top of ladder's resting point. Extension ladders must extend three rungs above the edge of the roof to accommodate exiting and accessing the ladder from the roof. Portable straight ladders and extension ladders shall not be used without non-skid bases. Ladders must be ascended or descended facing the ladder with both hands free to grasp the ladder. Tools must be carried

in a tool belt or raised with a hand line attached to the top of the ladder. Extension ladders should be tied in place to prevent sideslip. On two-section ladders up to 36 feet, allow a minimum lap of three feet.

HOISTING EQUIPMENT PORTABLE JACKS

Jacks and hoisting equipment are used to lift and hold items in a raised or elevated position. Overhead hoisting equipment shall be inspected monthly and maintained. Hoisting equipment should be inspected periodically by a certified professional per the manufacturer's written recommendations.

Ensure that the rated load of each hoist is legibly marked and visible to the operator. Stops shall be provided at the safe limits of travel for trolley hoists. The controls of hoists shall be plainly marked to indicate direction of travel or motion. Hoist chains or ropes must be of sufficient length to handle the full range of movement for the application, while maintaining two full wraps on the drum at all times. It is prohibited to use chains or rope, cable or slings that are kinked or twisted. The operator should avoid carrying loads over people. Rigging equipment and jacks shall be inspected prior to use to ensure that they are safe. Hydraulic jacks / hoisting equipment showing any evidence of leakage should not be used. Maximum lifting capacity shall be labeled on jacks and this limit shall not be exceeded.

SCAFFOLDING

- Proper barricading around the work area will be used to prevent injury from falling objects.
- Rolling scaffolds must maintain a 3:1 height to base ratio.
- The footing or anchorage for a scaffold must be sound, rigid, and capable of carrying the maximum intended load without settling or displacement.
- Mudsills shall be used for all scaffolding erection.
- Unstable objects such as barrels, boxes, loose brick, or concrete blocks must not be used to support scaffolds or planks.
- No scaffolding may be altered.
- Scaffolds and their components must be capable of supporting at least two times the maximum intended load without failure. Damaged scaffolds shall not be used.
- Guard rails and toe boards must be installed on all open sides and ends of scaffolds and platforms more than 10 ft above the ground or floor.
- The entire working level of the scaffolding must be totally planked.

AERIAL LIFT / CLAM / BOOM

A visual check of the work area for power lines or other obstructions before use is mandatory. Before using the equipment, the operator shall visually inspect the boom and outriggers. The person who will be working from the bucket shall set the outriggers. The outrigger shall be set whenever the boom/ clam is used. Outriggers shall sit on a stable surface. When lowering outriggers, a visual check is needed for person(s) or obstructions that may impair the safe setting of the outriggers. The micro brake or brake should be set after the aerial lift is spotted and the outrigger set. There shall be a minimum of two people on site when the aerial lift is in operation. Appropriate barricades and warning lights shall be used.

Operator shall wear the safety strap when working from the bucket. Buckets or clams must not be used if the weight or capacity is over the manufacturer's recommendations.

SPRAY PAINTING PROCEDURES

In any spraying operation there should be adequate ventilation before starting any spraying job. As to the conditions of the area where the spray job is to be done, consideration should be taken before beginning work. If the area is enclosed, it does require mechanical ventilation. If mechanical ventilation is provided when spraying in enclosed areas, to avoid contamination, air should not be recirculated. There should be adequate space and ventilation for all drying areas. In an enclosed area, spray operations must be at least 20 feet from flames, sparks, operating electrical motors and other ignition sources. There shall be no open flame or spark-producing equipment in the spraying areas. The spray area should be free of any hot surfaces. If portable lamps are used to illuminate the spray areas, they must be approved for the location and suitable for use in a hazardous location. Approved respiratory equipment will be provided and must be used when appropriate during spraying operations. If a spraying booth is used for the spraying operation, it must be made of metal, masonry or other noncombustible material. Make sure that "NO SMOKING" signs are posted in spray areas, paint rooms, paint booths and paint storage areas and the proper fire extinguisher is available. Exits shall be unobstructed from the spraying area.

Spray booths must be ventilated. Spraying area should not be allowed to accumulate or build up waste materials. Booth floors, ducts, access doors and baffles must be easily cleaned and noncombustible. Lighting fixtures for both outside and inside the spray booth must be enclosed in clear see-through sealed panels. Electric motors for exhaust fans must be placed outside the booth. Drying apparatus should be located in a well-ventilated area in the booth and properly grounded. Protective aprons or clothing used during spraying operations shall be properly stored when not in use. Quantities of flammable and combustible liquids in excess of one day's supply shall be stored in appropriate storage cabinets. All large quantities of stored flammable liquids shall be bonded and grounded.

FORK LIFTS

Employees who operate forklifts must be trained before operating a forklift.

Operators shall perform a visual inspection prior to the operation of the forklift. Only the operator shall ride in or on the forklift. No one shall stand under or pass under the elevated portion of the forklift whether loaded or empty. When leaving a powered forklift unattended: the load shall be lowered, controls neutralized, power shutoff and brakes set. Wheels should be blocked if the forklift is parked on an uneven surface. Fork extensions shall be used whenever necessary to minimize the possibility of the load from falling rearward, if the manufacturer has approved the use of extensions. Grades shall be ascended or descended slowly. When ascending or descending grades, loaded forklifts shall be driven with the load upgrade. Unloaded forklifts should be operated on all grades with the forks forward. On all grades the load and load engaging means shall be tilted back if applicable and raised only as far as necessary to clear the surface. Under all travel conditions forklifts shall be operated at a speed that will permit them to be brought to a stop in a safe manner. The driver shall slow down during low traction situations.

Stunt driving and horseplay will not be tolerated. Dock boards or bridge plates should be properly secured before they are driven over and the capacity not exceeded. When negotiating

turns, speeds should be reduced to a safe level while turning the hand steering wheel in a smooth sweeping motion. Only stable or safely arranged loads shall be handled.

Caution should be exercised when handling off-center loads, which cannot be centered. Only loads within the rated capacity of the forklift shall be handled. Ballast or personnel shall not be added to increase the lifting capacity of the forklift. Load engaging means should be placed under the load as far as possible. The mast shall be carefully tilted backward to stabilize the load. Fuel tanks shall not be filled while the engine is running.

WELDING AND CUTTING

It is required that eye protection helmets, hand shields and goggles meet appropriate standards. Employees exposed to the hazards created by welding, cutting, or brazing operations must be protected with personal protective equipment and clothing. Use care in handling and storing cylinders, safety valves, and relief valves to prevent damage. Inspect connections on cylinders for leakage with a soap and water mixture.

Cylinders, cylinder valves, couplings, regulators, hoses and apparatus must be kept free of oily or greasy substances. Cylinder and torch valves shall be securely closed when not in use. Always open the cylinder valve slowly. Open the fuel gas regulator first. Precaution must be taken to prevent mixture of air or oxygen with flammable gases, except at a burner or in a standard torch. Only an approved apparatus (torches, regulators, pressure-reducing valves, acetylene generators, manifolds) may be used. Cylinders must be kept away from sources of heat. Cylinders shall be stored in an upright position. Cylinders shall either be mounted on a portable cart or chained to the permanent structure. Cylinders shall be capped and be upright during transportation. *Appropriate means of securing the cylinders must be used during transportation. Cylinders not in use shall be stored 25 feet apart and away from welding areas or other combustible processes. Cylinders in use may be stored together on a welding cart.* Cylinders shall not be used as rollers or supports.

Empty cylinders must be appropriately marked, their valves closed and valve-protection caps on. Signs reading: DANGER-NO SMOKING, MATCHES, OR OPEN LIGHTS, or equivalent must be posted. Care must be taken not to drop or strike cylinders. Unless secured, all regulators must be removed and valve-protection caps put in place before moving cylinders. Defective valves shall be labeled "defective" and shall not be opened by force. All cylinders without fixed hand wheels must have keys, handles, or non-adjustable wrenches on stem valves when in service. Liquefied gases must be stored and shipped valve-end up with valve covers in place. Before a regulator is removed, the valve must be closed and gas released from the regulator. Red is used to identify the acetylene (and other fuel-gas) hose, green for oxygen hose, and black for inert gas and air hose. All pressure-reducing regulators must be used only for the gas and pressures for which they are intended.

Hoses shall be inspected monthly and only those in good condition without leaks shall be used. Hoses shall be stored in a manner to prevent tripping hazards and damage to hose. Suitable fire extinguishing equipment must be available for immediate use before starting to ignite the welding torch.

The open circuit (No Load) voltage of arc welding and cutting machines must be as low as possible and not in excess of the recommended limits. Grounding of the machine frame and safety ground connections of portable machines must be checked. Welding electrodes must be removed from the holders when not in use. The welder is strictly forbidden to coil or loop

welding electrode cable around his/her body. Welding cable shall be tied off to a secure location in the event of welding above or below ground level. Electrode lead cables must be inspected before use for wear and damage, and replaced as needed. All connecting cable lengths must have adequate insulation. When the object to be welded cannot be moved and fire hazards cannot be removed, heat shields must be used to confine heat, sparks and slag.

All combustible floors must be kept wet, covered by damp sand, or protected by fire-resistant shields. When floors are wet down, personnel should be protected from possible electrical shock. When welding is done on metal walls, precautions must be taken to protect combustibles on the other side. When completed on wall welding, check for proper wall cooling before leaving the structure.

Before hot work is begun, used drums, barrels, tanks and other containers must be so thoroughly cleaned that no substances remain that could explode, ignite or produce toxic vapors.

Check for adequate ventilation where welding or cutting is performed. After hot work has been completed, the area shall be monitored for thirty minutes to ensure the area has cooled.

TREE TRIMMING OPERATIONS

Proper barricading and warning signs shall be used to protect employees and the public. Vehicles and personnel not involved in trimming operations shall be clear of the area.
Be sure clear ground is barricaded if the aerial truck is used to transport tree limbs.
Site personnel shall determine whether an electrical hazard exists before climbing, trimming, or performing any work in the trees. *Employees shall wear personal protective clothing appropriate to the work location and conditions.* Minimal equipment should be head, eye, hearing, and face protection and may include chaps and proper footwear and no loose fitting clothing.

Gasoline powered equipment shall be refueled only after it has been stopped and cooled. Any spilled fuel shall be removed from equipment before restarting. Tree trimming equipment shall be maintained in good condition.

Employees shall not use the bucket of a front-end loader as an aerial lift to trim trees. Ropes should be coiled when not used and shall be inspected before use. Saws shall be secured from falling while being used from an aerial lift. Partially sawed-through limbs shall not be allowed to remain in the tree. Decide exactly how the limb shall be grasped to avoid sharp edges, slivers, and splinters that might cause injury**.**

CHIPPER

*Employees shall wear personal protective clothing appropriate to the work location and conditions***.** Work area of chipper shall be protected from traffic and from the public. Foreign materials such as stones, nails, sweepings, etc., shall not be fed into the chipper. Inspect the material to be chipped before work begins. Access panels for maintenance and adjustments shall be closed and secured prior to operation of brush chippers. Chipper blades should be tight and clear of any debris before the engine is started. Disengage clutch before starting the chipper. The emergency shutoff shall be clearly marked.

Arms, legs, and tools shall not be used to clear the chute. The engine should be turned off when the chipper is not in use or is unattended. Gasoline powered equipment shall be refueled only after it has been stopped and cooled.

STUMPER

Employees shall wear personal protective clothing appropriate to the work location and conditions. Utility locations must be located before using the stumper. Work area of stumper shall be protected from traffic and from the public. Check for obstructions before backing onto position. Safety skirts shall be in place before starting machine. Check cutting wheel for debris before operation. Cutter shield shall be used when stumping. The operator shall permit no one behind the stumper while it is in operation. The engine should be turned off when the stumper is not in use or is unattended. Gasoline powered equipment shall be refueled only after it has been stopped and cooled.

PART 13 CHEMICAL SAFETY, HAZARDOUS MATERIALS/ CHEMICALS HAZARD COMMUNICATION PROGRAM

The purpose of this program is to ensure that the hazards of all chemicals used by employees are known, and that information concerning their hazards is transmitted to affected employees within the working environment. This transmittal of information is to be accomplished by means of *employee training programs, which are to include container labeling, Safety Data Sheets, employee rights and other training deemed applicable.* The hazardous communication program shall consist of the following:

Hazardous Material Labeling

A. The employee receiving the new substance will assure that each container of hazardous substances in the work place is labeled with the chemical name and manufacturer's label.

B. Containers of ten (10) gallons or less in volume, into which a chemical mixture is being transferred by an employee from labeled containers and which is intended for immediate use of the employee making the transfer, are exempt from such labeling. However, if the chemical is not used immediately, or if the chemical is transferred to another employee, the name of the chemical must be identified on the container.

Safety Data Sheets (SDS)

A. The employee purchasing or receiving a new hazardous substance will be responsible for obtaining Safety Data Sheets for each hazardous substance. Each employee purchasing or ordering a hazardous substance will not obtain or bring on site the hazardous substance until the Safety Data Sheets are obtained. If ordering, instruct seller to send the Safety Data Sheets by fax or with the shipment and that the material will not be accepted in shipment until the Safety Data Sheet is obtained. Always replace old Safety Data Sheets with new Safety Data Sheets as they are obtained.

B. Each employee will review Safety Data Sheets on any new hazardous substances before using them.

C. Safety Data Sheets shall be accessible to employees in a highly visible manner for review by employees when utilizing hazardous substances.

D. One person shall be designated to organize and maintain quarterly inspections of Safety Data Sheets.

E. Training shall be provided to insure employees using Safety Data Sheets know how to read Safety Data Sheets for specific emergency information.

Storage of hazardous materials

A. Hazardous materials shall be contained in approved storage according to the specific hazard they may present. (Example: flammable, corrosive, explosive etc.)

B. Proper methods of transferring toxic substances from stored containers shall be used (Example proper protection for specific hazardous materials, proper ventilation.)

C. A spill clean-up kit shall be kept in the area of storage of hazardous substances.

D. Employees shall be trained in spill cleanup.

Appropriate fire extinguisher shall be placed in a readily accessible location near where flammable materials are stored.

Building hazards

A. Visible signs will be posted on or near the entrance of buildings that have or may have hazardous substances.

B. Signs will indicate: health hazard (BLUE), flammability (RED) or reactivity (YELLOW) levels of substances contained inside buildings. A rating of 1, 2, 3 or 4 indicates these levels. The number one (1) indicates the lowest level of hazard increasing to four (4), which is the highest level of hazard.

NOTE: As the transition to Global Harmonized System of labeling is made, signs shall be updated.

C. Entrance hazard signs will also list on a white patch, specific chemical hazards such as: acids, corrosive, alkali, oxidizer, radioactive, or use no water.

Written program for hazardous materials

A. Safety training shall be conducted on hazardous communications relating to substances that are to be applied or create a work environment that may contain exposure to large quantities of a hazardous substance. (Example: pesticides enclosed areas of application.)

B. Contracted workers exposed to hazardous substances on the work site shall be informed to the specific hazards the individual work site shall contain.

C. Employees shall use the proper procedure for the chain of command to implement procedures in a non-standard hazardous substance exposure condition.

D. General emergency training shall be provided for injuries, illness, spills or fire/explosions. Examples of these general emergencies are eye contact and treatment, ingestion and treatment of acids vs. alkalis, correct fire extinguishers for specific type of fires, and methods for containing larger chemical spills.

CHLORINE

Follow manufacturer's instructions and use personal protective equipment while using Chlorine.

PART 14: HERBICIDE, PESTICIDE SPRAYING

Personal Protective Equipment shall be worn. *Have a first aid kit on hand. Keep a spill cleanup kit on hand at all times.* The kit should contain all equipment necessary for spill cleanup or containment. *The applicator shall be certified in the application of the herbicide or pesticide in which they are applying*. Read all sections of the SDS and labeling before opening the chemical. The chemical labeling contains precautions and instructions that you must follow in order to use the product safely and appropriately.

Always keep clothing, food, drinks, chewing gum, tobacco products, and other belongings away from where weed and pesticide chemicals are stored or handled. When you take a break, wash your gloves on the outside, remove your gloves, wash your hands and face thoroughly. Be aware of situations where you may be exposed to weed or pesticide chemicals on the job. Always use caution when mixing, loading, applying, cleaning, repairing, transporting and disposing of a weed chemical or pesticide. The applicator shall be aware of the possible drifting of the chemicals and adjust the application as necessary.

PART 15: TRENCH SAFETY

Individual departments will conduct periodic training sessions on cave-in protection and trench safety.

An employee fully trained in trench inspection shall inspect a trench each day to verify stability of the soil for the safety of employees.

Each department that works with trenching shall develop and review trenching procedures before each excavation. The program shall include information on both construction and rescue.

A trench is a narrow excavation in which the depth is greater than the width and the width is not greater than 15 feet. There shall be a top man when a City employee enters the trench. Trenches over five feet in depth shall be sloped, shored, sheeted, braced or otherwise supported. Trenches less than five feet in depth where conditions are unstable shall be sloped, shored, sheeted, braced or otherwise supported. Whenever an excavation is four feet deep or more, ladders or steps shall be provided. *Trench workers shall have a means of egress within 25 feet***.** A trench shield is a prefabricated steel or wood box that is attached to a heavy steel box. The trench box may be used if it provides equal to or greater than the

protection that would be provided by the appropriate shoring system. *City employees may refuse to enter any trench which he/she has reasonable cause to believe unsafe.*

PART 16: CONFINED SPACE ENTRY

The dangers of hazards that cannot be easily seen, smelled, heard, or felt can present a deadly risk to persons working in confined areas. The chance always exists that a reduced oxygen level or those combustible or toxic gases may be present in these areas. Confined spaces are defined to include but are not limited to: manholes, sanitary and storm sewer lines, wet wells, and meter pits. A dry well in which the ventilation system has not operated for a length of time should also be considered a confined space. Under certain circumstances a storm sewer will also fall into this category. This procedure has been established for use by the City of Watertown to prevent worker exposure to dangerous air contamination and /or oxygen deficiency. This is presented as a general approach for work in confined spaces.

GENERAL

A written copy of the confined space form as required by these procedures shall be at the work site for the duration of the confined space entry.

SAFETY

1.0 Confined Space - A space where unfavorable natural ventilation exists; existing ventilation is inadequate to remove dangerous air contamination and/or oxygen deficiency, either existing or that may develop; limited openings for entry and exit; not designed for continuous worker occupancy.

2.0 Testing - The use of a gas detector to measure concentrations of toxic or explosive/flammable gases or oxygen in the atmosphere. The minimum parameters to be measured are H_2S concentration (Hydrogen Sulfide), L.E.L. (Lower Explosion Limit), Oxygen and Carbon Monoxide. The gas detector is calibrated to each specific gas monthly. Prior to each confined space entry the detector shall be fresh air calibrated, as described in the procedure portion to follow.

3.0 Test gases for air contamination and specific levels of exposure allowed prior to and during a confined space entry.

A. **(H_2S) Hydrogen Sulfide**
   * 50- PPM. Instantaneous
   * 15- PPM short-term exposure limit (STEL for 10 minutes)
   * 10- PPM time weighted average (TWA for 8 hours)
   (National Institute for Occupational Safety and Health)

B. **(CO) Carbon Monoxide**
   * Lower limit 35- PPM no more than 15 minutes
   * Never to exceed 200 PPM

C. **(L.E.L) Lower Explosion Limits**
   * Presence of explosive or flammable gases, never to exceed 10%. If the presence of other toxic contaminants is suspected, specific monitoring programs will be developed.

4.0 **Oxygen Deficiency-** A concentration of oxygen in the atmosphere less than or equal to19.5% by volume.

5.0 **Oxygen Enrichment-** A concentration of oxygen in the atmosphere greater than or equal to 23.5% by volume.

6.0 Training – All personnel conducting a confined space entry shall be trained in the following subjects:

A) Gas detectors
B) Proper completion of confined space entry permit
C) Cardiopulmonary Resuscitation (CPR)
D) Ventilation

7.0 Gas detector calibration test - The gas monitor will self-test to ensure all gas sensors are operational upon start up. The gas detectors sensors are calibrated monthly or in accordance with manufacture specifications. When starting up detector before each entry the fresh air calibration should be done to ensure all gas is cleared from sensors from previous use (fresh air calibration is described in pre-entry procedures).

PROCEDURE

Pre-Entry –

The following steps shall be followed before any employee is permitted to enter a confined space:

1. Confined Space Entry Permit - The Confined Space Entry Permit must be completed before entry approval can be given to a confined space. This permit shall be kept on the job site for the duration of the job. If circumstances cause an interruption in the work or a change in the atmospheric conditions, a new permit must be completed.

2. Surveillance - The surrounding area shall be surveyed to avoid hazards such as drifting vapors from tanks, piping or sewers. Lines which convey flammable, injurious or incapacitating substances into the space shall be disconnected, blinded, or blocked off by other positive means to prevent the development of toxic air contamination and/or oxygen deficiency within the space

3. Start the gas detector and calibrate as directed by the manufacturer.

4. Testing - The confined space atmosphere shall be tested to determine whether toxic air contamination and/or oxygen deficiency exists. In the case of manholes, the toxic levels should be checked before removal of cover. If the toxic levels exceed the specific limits, the confined space entry cannot continue. The contamination hazard must be eliminated by isolation, natural or mechanical means.

5. Space Decontamination - Mechanical ventilating systems shall be used where applicable; they shall be set at 100% outside air. Where possible, open additional manholes to increase circulation. Use mechanical ventilation to augment natural ventilation. After a suitable ventilating period, repeat the testing of the confined space atmosphere. If decontamination is effective and it can

reasonably be assumed the space will stay free of hazardous contaminants or oxygen deficiency, only then may the confined pace entry proceed.

6. Equipment associated with the confined space entry shall be locked out and de-energized before the entry takes place.

7. Another departmental employee shall be contacted for a radio check prior to the confined space entry.

Entry Procedures

Entry shall occur only after pre-entry conditions have been met. The following criteria shall be observed under confined space conditions:

1. When practical, all confined space entries shall be entered through side openings.

2. At least one worker shall standby outside of the space.

3. The standby person shall monitor the space continually by inserting the sampling tubing connected to the gas detector meter. The suction side of the tubing shall be kept as close as possible to the occupant of the confined space entry. The concentrations shall be recorded on the confined space entry permit at 30-minute intervals. If the standby person cannot monitor some entries effectively, in these cases the entrant shall carry the gas detector.

4. During the confined space entry the standby person shall have a City radio to contact assistance if needed.

5. The person entering must wear approved safety retrieval equipment at all times during the confined space entry. The safety retrieval equipment shall be used if the depth is more than five feet from the top of the confined space (OSHA 1910.146(K)(3)(ii).

6. Work involving the use of flame, arc, spark or other source of ignition is prohibited within a confined space which contains or is likely to develop toxic air contamination due to flammable and/or explosive substances.

7. If at any time there is a questionable action or non-movement by the worker in the confined space, a verbal check and physical attempts to contact the entrant shall be made. If there is no response, notify emergency response via City radio immediately that this is an emergency, the specific location of confined entry and any information that might aid rescue. Only after Emergency Medical Services have been informed, shall an employee attempt to retrieve the entrant by means of safety retrieval equipment. The standby worker may enter the confined space in case of an emergency only after obtaining at least one other standby person to monitor the entrants. If the worker is disabled due to falling or impact, he/she shall not be removed from the space unless there is immediate danger to his/her life.

PART 16: CONFINED SPACE ENTRY (CONTINUED)

8. When dangerous air contamination is attributable to flammable and/or explosive substances, lighting and electrical equipment shall be Class 1, Division 1, rated per National Electric Code and no ignition sources shall be introduced into the area.

9. If confined space atmospheric conditions change adversely, entry personnel shall exit the confined space immediately and retest. Toxic conditions must be resolved and a new pre-entry form must be completed before reentering.

10. In any situation where their use may endanger the worker, use of the hoisting device or harness may be discontinued.

11. Employees working in confined spaces which previously contained substances corrosive to the skin or substances which can be absorbed through the skin shall be provided with and required to wear, appropriate personal protective clothing or devices.

PART 17: LABORATORY SAFETY

Protective clothing appropriate to the task shall be worn at all times when working in the laboratory. This may include gloves, goggles, face shields, explosion shield, coat or apron, or boots as indicated in the laboratory safety procedures. To prevent exposure to others of contaminants, protective clothing should not be worn outside of the laboratory. Laboratory personnel shall be aware of the particular hazards to themselves and to others that exist as a result of working in a laboratory. Smoking, eating, or drinking in the laboratory shall be prohibited. No food or drink shall be placed in a laboratory refrigerator or freezer.

Mouth pipetting or use of pipetting aspirators, aids or devices in the mouth shall be prohibited. Laboratory workers shall wash their hands thoroughly with an appropriate cleanser or antiseptic after handling chemicals, reagents, solvents, biological samples or specimens, lab instruments or equipment. Laboratory workers shall observe laboratory or manufacturer's guidelines for the safe use of hot plates, ovens, furnaces, Bunsen or other gas burners, incinerators, and steam sterilizers. Tongs or thermal protective gloves should be used when handling hot objects. Safe storage and handling of compressed gases and chemicals shall be observed. Laboratory personnel shall be familiar with the procedures for the use of drench showers and eyewash stations, and for assisting others in need of these devices.

Biological Hazards: Laboratory workers shall be familiar with and observe the laboratory biohazard safety procedures to prevent exposure of themselves and others to biological hazards associated with human and animal specimens, water, and waste water.

Chemical Hazards: Laboratory workers shall be familiar with and observe the laboratory procedures for the safe storage and handling of chemicals, reagents, and solvents. Laboratory workers shall be familiar with and observe the laboratory procedures regarding electrical and mechanical hazards associated with laboratory instruments or equipment. Laboratory workers shall be familiar with and observe laboratory procedures for the prevention of exposure to themselves or others of hazardous radiation.

PART 18: PERSONAL HYGIENE

Possible hazards include the water-borne diseases such as Typhoid Fever, Para-Typhoid Fever, Dysentery, Infectious Jaundice, Hepatitis, and Tetanus. The best defense against infection is the practice of good personal hygiene. Hands and fingers should be kept from the nose, mouth, eyes and ears. Rubber gloves shall be worn for work in which an employee comes in direct contact with a potential infectious material. Gloves should be worn when hands are chapped, burned, or when the skin is broken from any other cause. Hands should be thoroughly washed with soap and water before eating or smoking. Fingernails should be kept short and foreign materials should be removed from the nails with a stiff, soapy brush. Small cuts and scratches should be given first aid and covered as necessary. Wash your gloves on the outside, remove your gloves, and wash your hands and face thoroughly after possible contact with an infectious substance.

PART 19: TRAFFIC CONTROL

Work site crews shall wear brightly colored fluorescent vests or clothing appropriate to the work area; the regulations vary among different authorities (OSHA, MUTCD, ANSI, Federal Highway Administration or other governing entities) for each worker. Each department is responsible to ensure their workers have the appropriate safety clothing for the work situation.

Brightly colored fluorescent clothing provides high visibility to employees giving drivers time to act appropriately. A Traffic Control Work Area Plan outlining proper procedures for traffic control shall be set up by individual departments. Every City employee involved with work in or near traffic shall be familiar with the best type of traffic control for the situation.

Barricades shall adequately surround the work area; workers should remain within the protected area and use caution when leaving the area. Traffic must be clearly directed around the work area.

Lane reduction signs shall be posted well in advance to give motorists ample time to change lanes. Give drivers early warning in congested areas or where the roadwork is obstructed.

Warning signs must be highly visible and kept clean. Don't confuse drivers with contradictory signs or markings. Maintain credibility with drivers by doing what your signs say.

When reducing traffic lanes, employees shall follow the current guidelines provided by USDOT in its' Manual on Uniform Traffic Control Devices.(M.U.T.C.D.).

ATTACHMENT I
City of Watertown
EMPLOYEE SAFETY CONCERN FORM

Date: **Day:** **Time:**

Department: _____**, Division:** _____

Person Filing the Concern:

Name: _____

Signature: _____

Phone: _____

Email: _____

Complaint Specifics:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Forward to Supervisor: (Name): _____

Date received by the Supervisor: _____

Time received by the Supervisor: _____

Response / Corrective action:

_____
_____
_____
_____

Date/Time of Written Response to the Employee:

_____

Employee, please retain a copy for your records.

ATTACHMENT II
STATEMENT OF RECEIPT AND INSPECTION

I, _____, hereby acknowledge receipt of one copy of the City of Watertown's Safety Manual. It is my responsibility to read and ask questions regarding the policies and procedures contained in the Safety Manual. I also understand that is my responsibility to follow the City of Watertown Safety Manual.

Date_____

Signature_____

FORWARD THIS TO PERSONNEL RECORDS.