CITY OF FOND DU LAC

SAFETY HANDBOOK

Updated September 2009

FORWARD

We are concerned about the safety of people in this organization and the public we serve. We have a duty to provide safe working conditions for employees and a safe environment for the public that depends on us. I'm sure you share our concerns for safety because it's your life and your livelihood that gets damaged by accidents. This booklet will provide you with practical, common-sense ways to prevent accidents.

Our goal must be to provide municipal services without accident or injury, and we all share responsibility for achieving that goal. A good safety record is the direct result of the effort we are willing to put into it. Wishful thinking won't produce the results we must achieve. We take these safety rules and procedures very seriously, and we know you will too.

INTRODUCTION

This handbook is issued to inform City employees about the management policies that are the basis for our occupational safety program, and to establish uniform safety procedures for tasks that are performed in more than one public service division. Safety procedures for specialized tasks performed solely by one particular activity shall be prepared by the department head concerned and, after approval, issued only to employees performing those tasks. It should be emphasized that all employees should comply with these specialized rules whether they are included here or not.

The handbook is divided into chapters, each concerned with a particular type of task, equipment, operation, or hazard so that they will be easy to read, understand, and follow. As new chapters or amendments are published, they will be distributed to you.

All employees shall be asked to sign a receipt for this booklet. This is merely to verify that all employees have received the booklet; it does not indicate the employee agrees with all of the contents. Employees will be expected to familiarize themselves with the contents of the booklet. Employees will be expected to comply with the policies and procedure established in this booklet. Employees who do not comply with these safety procedures may be subject to disciplinary procedures.

Department and division heads have been directed to make safety a matter of continuing concern, equal in importance to all other operational considerations. They have further been directed to develop and administer an active department safety program. The program sets standards every employee must adopt if it is to be successful.

All employees are charged with responsibility for cooperating with, and supporting, the safety program objectives. Every employee is expected, as a condition of employment to concern himself with his own safety, the safety of his fellow workers, and the safety of the general public

affected by City functions. This means willing acceptance and active support of approved safety rules and procedures.

It is important that employees be constantly on the alert for potential hazards which are not referred to in any written practices, but which may result in injuries or property damage. Where potential hazards are thought to exist, employees shall use all known precautionary measures, and when in doubt as to the procedure to follow, shall consult their supervisor before proceeding with the work. Accident prevention can be the most important employment benefit we have.

Employees are encouraged to make suggestions to make the workplace safer. Safety suggestions should be made to your immediate supervisor. We are also forming a Safety Committee comprised of bargaining unit and management/supervisory personnel to review safety suggestions. Safety is an important issue and we hope that following the policies and procedures in this book will make the workplace safer for everyone.

RECORD OF CHANGE TRANSMITTALS		
Page	**Chapter**	**Date Adopted**

CITY OF FOND DU LAC
EMPLOYEE SAFETY HANDBOOK

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CHAPTER 1 - GENERAL RULES

The Safe Work Procedures outlined in this manual are designed to give employees a broad look at the safest methods of performing many of the job functions required in City operations.

Employees are expected to follow the general procedures listed here, and any additional procedures required by their department or division, which pertain to their own safety.

Most accidents are caused by the unsafe use of equipment, materials, or tools and by neglecting to follow safe work procedures.

Learn the Safe Work Procedures for your job. Remember - No hazard is too small for correction.

Safety suggestions are welcome - in fact, requested. If you know a way to make a job safer, tell your supervisor. Additional safe practices will be issued from time to time by your supervisor or department heads.

Violations of Safe Work Procedures may subject you to disciplinary action.

In Case of Injury

1. All injuries, no matter how slight, must be reported immediately to your supervisor or foreman.

2. If you must see a doctor, obtain an authorization form from your supervisor.

3. If an ambulance is needed, dial Fire Department Rescue Squad, 911.

4. If medical attention is required, the employee shall be sent to the nearest medical facility. If the injury demands immediate emergency medical treatment, send the employee to the emergency room at the nearest hospital.

Safety Responsibilities

Supervisor - Foreman

In general, supervisors and foreman are responsible for insuring that all employees under their jurisdiction are aware of the hazards related to their jobs and that safe work procedures are followed and understood.

In cases of violation of established safe work procedures, supervisors and foremen are responsible for initiating disciplinary and corrective action.

Employee

You, as an employee, have the responsibility to follow all safe work procedures. When you observe unsafe working conditions, it is your obligation either to correct the problem or to report it to your supervisor. It is not your responsibility to attempt a job which appears to be unsafe. Ask your supervisor for instruction or clarification. You are required to be familiar with, and to observe safer

methods in doing your job. Failure to follow established safety work procedures may result in disciplinary action.

Safe Work Procedures - General

1. Report all personal injuries, no matter how minor, to your immediate supervisor as soon as possible. This must be done whether the injury resulted in lost time from work or required medical attention or not. Prompt reporting of accidents is a requirement under Federal and State OSHA Laws and the Workmen's Compensation Law.

2. The City does not expect you to take any unnecessary chances to work under hazardous conditions. Learn the right way to do your job. That will be the safe way. If you are not sure you thoroughly understand the job, ask your foreman for further instruction.

3. Fighting in the workplace, on the job site, or on City property is prohibited. Violation will result in disciplinary action or dismissal.

4. Avoid horseplay and practical jokes on the job. Any employee participating in such activities shall be subject to disciplinary action.

5. Maintain clean equipment and orderly work areas - they are important to accident and fire prevention.

6. Use of alcoholic beverages or other non-prescribed drugs, illegal drugs, or drugs not intended for the treatment of a specific illness or injury, or reporting to work under their influence is prohibited. When using prescribed drugs from a doctor or non-prescribed drugs for a cold or other illness, employees should exercise their own discretion and report any condition to their supervisor which they feel would impair their ability to safely perform their job.

7. Smoking is prohibited in the vicinity of flammables and where "No Smoking" signs are posted. [Per City Ordinance No. 2658]

8. First aid kits are provided in certain work areas for your protection. They are to be used only until adequate medical attention can be obtained.

9. Employees working in streets and areas exposed to traffic hazards must wear ANSI approved high-visibility safety vests and/or florescent green clothing.

10. Keep yourself in good physical condition to do a day's work.

11. Use the handrails on stairs or on elevated places.

12. Jumping from an elevation such as a table, bench, or platform is liable to result in serious injury. **"DON'T DO IT."**

13. Always inspect tools and equipment before use. Report defects to supervisors and other potential users. Do not use tools and equipment that are defective to an unsafe degree.

14. Remove splinters from work benches, tables, bins, shelves, or chairs before someone is injured.

15. Remove, cut off, or hammer down protruding nails, staples, or steel straps.

16. Work clear of suspended loads; if a load is moved above where you are working, stand aside until it has passed by.

17. Obey warning tags and signs. They are posted to point out hazards.

18. Operate only the machinery or equipment you have been authorized and trained to operate safely.

19. Remove jewelry such as rings, identification bracelets, etc., in work involving climbing, materials handling, or operating mechanical equipment.

20. Never reach over moving parts of machinery or equipment.

21. Never operate machinery or equipment with guards removed.

22. Report to work in appropriate clothing suitable for the type of work you perform. This includes footwear. Avoid wearing loose clothing or personal equipment near machinery or equipment with moving parts.

23. Wear protective equipment as required; its use will be enforced.

24. Common sense, health and sanitation rules must be observed for the welfare and consideration of other employees.

CHAPTER 2 - OFFICE SAFETY

Office work is more dangerous than is commonly supposed and many accidents occur during ordinary office routine.

1. Keep your work area neat and orderly.

2. Desk, cabinet and file doors should not be left open when unattended. Only one file drawer should be opened at a time.

3. Report defective equipment and machines.

4. Report unsafe conditions such as loose floor tiles, carpeting, stair treads, railings, etc. to your supervisor at once.

5. Chairs, wastebaskets, cords, etc. must not be placed across aisles or where they will create a tripping hazard.

6. Do not dispose of broken glass or sharp objects in wastebaskets. Set safely aside and mark for pickup.

7. When fans are located less than seven feet (7') above the floor or working level, the blades shall be guarded. The guard shall contain no openings larger than one-half inch (2").

8. Do not run in hallways or on stairs; use handrails.

9. Keep walking surfaces clear of debris.

10. When opening or closing doors, be watchful for other employees.

11. Never climb on chairs, boxes, file cabinets, etc. Use a ladder or stepstool designed for that purpose.

12. Do not block elevator doors open.

13. Do not overload or overcrowd an elevator. Observe the load limit signs.

14. Allow those on the elevator to exit before you enter it.

15. Keep your body away from automatic doors so that clothing or body parts will not become caught.

CHAPTER 3 - PERSONAL COMPUTER OPERATION

The use of personal computers has become a standard part of most office jobs. Computers have revolutionized the way many office tasks are completed. Standard typewriters have been replaced with personal computers and laser printers that bring print shop capabilities to the top of a desk. Computers also make it much easier to store, access and manipulate data.

Computers have boosted office productivity, but they have also created a host of other problems. Attempts have been made to link Video Display Terminals (VDTs) with a variety of health problems. Many employees fear that VDTs emit harmful levels of radiation and cause increased levels of stress and fatigue.

There are still a lot of questions that remain to be answered regarding health risks associated with VDTs. However, with regards to radiation emissions, independent studies conducted by the National Institute for Occupational Health and Safety (NIOHS) and the Food and Drug Administration (FDA) have found VDTs emit very low levels of radiation that are well within safety limits established by the federal government.

While VDTs do not pose a radiation hazard to employees, computers have changed the way work is done in the office, and it is appropriate for employees to be concerned with the potential health risks associated with their use. By automating the work place, computers have made office work much more routine in much the same way that assembly lines made factory work much more routine at the turn of the century. Office work now requires less physical motion, and movements are very repetitive in nature.

Employees are now able to remain at their work stations for longer periods of time, and there is less variation in tasks. Routine things like loading paper in a typewriter or filing and retrieving documents are now done by the computer, giving the operator less chance to move around. Much like assembly line workers, office workers may now find themselves performing one repetitive task for long periods of time.

This does not mean that there is nothing that can be done to enhance or improve the work performed by computer operators or word processors. This section will list some of the things operators and their supervisors can do to make their jobs better and to reduce the risk of injury that can occur from prolonged use of computer terminals and personal computers.

Back, Neck and Arm Strains. Because computer operators are required to remain in stationary sitting or standing positions and make many repetitive movements, they are susceptible to injuries of the back, neck and arms. The key to preventing injuries of this kind is maintaining proper posture, proper equipment and variation of job tasks. Listed below are steps which employees and supervisors can take to reduce the chance for injury.

Tips for Employees:

1. Adjust chairs and keyboards to proper height. Your hands should be parallel with the keyboard. Avoid positions in which you must bend your wrists backwards to type. This will place pressure on the wrist which could cause injury. If you work with an older unit with a thick keyboard, you may need to use a wrist support to maintain proper position.

2. If it is necessary to adjust the height of your chair so that your feet do not rest flatly on the floor, use a footrest to avoid putting undue pressure on your legs which limits blood circulation.

3. Avoid slouched positions. Adjust your chair and equipment so that your lower back is supported and you can maintain a posture similar to that in the diagram on the following page. Make sure you can move your chair close enough to your terminal so you don't have to reach.

4. Try to arrange your work so that you can alternate standing and sitting positions. If you can't do this, try to take short breaks each hour. Get up, move around and stretch. If you have a stand-up terminal, use a stool to alternate standing and sitting positions.

5. Use document holders to position and hold source materials. Position documents and secure them so that you don't have to tilt your head at uncomfortable angles to view them. Your view angle or the angle between your eyes and the center of the screen or source document should not be more than 15-20 degrees, or less than 5-10 degrees (see diagram). Position documents so they are within easy reach.

6. Take care of yourself away from the job. Exercise regularly and maintain good physical condition.

Tips for Supervisors:

1. Make sure employees have proper support equipment such as document holders, footrests, wrist supports, etc. Purchase chairs and tables designed for use with PCs and terminals. Chairs should have good back support, short, removable arms, and height should be easily adjustable. Tables should have plenty of surface area for documents and have a recess for keyboards that are adjustable for height.

2. Try to vary work assignments so employees are not required to sit or stand at terminals for long periods of time. If this is not possible, allow employees to take short breaks and stretch or alternate standing or sitting positions.

3. Observe employee posture and remind them of proper posture and how to adjust equipment to obtain proper posture.

4. Listen to employees. React to suggestions that could reduce risk of injury.

5. Review equipment regularly and replace worn or outdated support equipment.

Vision Care: A major problem for many terminal operators has been eye strain. Much of the work performed on terminals requires close attention to detail. This combined with the nature of the video display terminal itself helps to create special problems for operators. Listed below are some steps which can be taken by employees and supervisors to help reduce eye strain associated with use of a VDT.

Tips for Employees:

1. Keep multiple reading surfaces, for example, video terminal and documents, for input about the same distance from your eyes.

2. Check your work area for areas that minimize reflections, glare, and any other distractions.

3. Relax your eyes periodically by looking momentarily at an object some distance away from the screen.

4. If your work station is near a window, place the video terminal at a right angle to the window.

5. Avoid directly lighting the video display terminal. Instead, use the brightness and contrast controls.

6. Use the tilt and swivel adjustment on your screen to help position the angle of the screen to reduce reflection and glare.

7. If you are directly lighting documents, place the light so it does not create glare and reflections. Place lights to the side so they do not reflect directly on the screen and try to keep light levels about equal.

8. Use the brightness and contrast controls to adjust the brightness of the screen to a level that will reduce glare.

9. Close blinds or pull shades to help block sunlight.

10. Get regular eye exams and be sure to inform your physician that you work regularly with a VDT.

Tips for Supervisors:

1. Try to position monitors away from areas where glare will be a problem (away from windows, direct lighting, etc.)

2. Provide glare screens, hoods, etc. for terminals that are located in areas where glare is a problem.

3. Walls should be of a matte or flat finish instead of gloss to help reduce reflected light.

4. Equip windows with blinds or shades so they can be drawn or closed.

5. Try to maintain even lighting throughout the work area.

6. Isolate VDTs on their own electrical circuits or provide voltage surge protectors.

7. Keep computer equipment well maintained.

CHAPTER 4 - HOUSEKEEPING

Many painful, and sometimes disabling, injuries are caused when employees are struck by falling objects, or striking against or tripping over objects they did not see. Many injuries and much property damage stems from fires caused by poor housekeeping practices and improper storage of flammable materials. The best protection against these hazards is good housekeeping.

When materials are stored properly with adequate space to move through the storage area, or with adequate clearance to work within the storage area, accidents are prevented. With some planning before laying out a job, tripping hazards can be avoided and many other sprains, fractures and bruises that result from falls can be prevented.

Aside from accident prevention benefits, good housekeeping means efficient performance. When materials, tools, and equipment all have a place for orderly storage, and are returned to the proper place after use, they are easier to find and easier to inspect for damage and wear.

The following safety procedures are established:

1. Keep work areas and storage facilities clean, neat and orderly.

2. All aisles, stairways, passageways, exits and access ways to buildings shall be kept free from obstructions at all time. All grease and water spills shall be removed from traffic areas at once.

3. Do not place supplies on top of lockers, hampers, boxes, or other moveable containers at a height where they are not visible from the floor.

4. When piling materials for storage, make sure the base is firm and level. Cross tier each layer. Keep piles level and not stacked too high. Keep aisles clear and with adequate space to work in them.

5. When sorting materials suspended from racks or hooks, secure it from falling, and route walkways a safe distance from the surface beneath.

6. When storing materials overhead on balconies, provide adequate toe boards to prevent objects from rolling over the edge.

7. Do not let soft drink and food containers, soiled clothes, etc. accumulate in lockers, vehicles, and work places.

8. Tools, equipment, machinery and work areas are to be maintained in a clean and safe manner. Defects and unsafe conditions shall be reported to your foreman.

9. Return tools and equipment to their proper place when not in use.

10. Lay out extension cords, air hoses, water hoses, ladders, pipes, tools, etc., in such a way as to minimize tripping hazards or obstructions to traffic. At the end of the work day, air hose, cord, etc. shall be coiled and hung up.

11. Clean up spills immediately to avoid slipping hazards. In the event the removal cannot be done immediately, the area must be appropriately guarded, signed or roped off. Snow shall be removed from all access sidewalks and exterior stairs to buildings as soon as practicable. In the event the snow cannot readily be removed from traffic areas, it shall be sanded or the area roped off.

12. Nail points, ends of loop or tie wires, etc., must not be left exposed when packing and unpacking boxes, crates, barrels, etc. Nails are to be removed as soon as lumber is disassembled.

13. Sharp or pointed articles should be stored as to prevent persons from coming in contact with the sharp edges or points.

14. All packing materials should be properly disposed of to prevent fire.

15. Wastebaskets are to be emptied into approved containers.

16. Oily and greasy rags shall be put in a metal container for that purpose.

17. Adequate lighting in obscure areas shall be secured for the protection of both employees and public.

18. All switches or drives on machinery shall be shut down and locked out before cleaning, greasing, oiling, or making adjustments or repairs.

19. Control of fuse boxes should be kept closed at all times and clear within a radius of three feet (3').

20. Extension cords should not be run across aisles or through oil or water. Cords should be inspected for kinks, worn insulation, and exposed strands of wire before use.

22. When fuses blow continually, it is an indication of an overload or short. This condition should be reported to your supervisor.

22. Keep electrical equipment properly oiled, free of grease and dirt.

23. To prevent static sparks, keep drive belts dressed. Also check belts for proper tension to prevent overloading motors.

24. Fire inspections and prevention measures shall be maintained.

CHAPTER 5 - FIRE PREVENTION

One of the most fearsome and damaging disasters that can occur in work activities is fire. In the variety of activities performed in municipal operations, there are shops and job sites in which potential fire hazards exist. Fires can be prevented by orderly planning, sensible arrangement of fire-producing activities in relation to combustible materials, good housekeeping, and observance of practical controls of smoking habits when flammable substances are present.

The following safety procedures are established:

1. Fire equipment shall be prominently displayed and kept clear for easy access at all times.

2. Know the location of fire extinguishers in your work area. After use of an extinguisher, report such use immediately to your supervisor so a replacement may be obtained or the extinguisher recharged.

3. Do not use water type extinguishers on electrical fire because of the danger of electrocution. They are intended for use on Class "A" fire only (flammables such as wood, paper, rags, etc.)

   The following chart will help you understand the equipment. Be sure you sound the alarm, get others out and call the Fire Department as quickly as possible.

TYPE **FIRE HAZARDS**	**TYPE** **EXTINGUISHING AGENT**
Class A (Ordinary Combustibles) Paper, wood, grass, cloth, trash, etc.	**WATER** or **FOAM**
Class B (Flammable Liquids) Oil, paint, thinner, solvents, grease, gasoline, etc.	**FOAM** - Blankets the surface **DRY CHEMICAL** - Heat creates carbon dioxide, eliminating oxygen
Class C (Electrical Equipment) Wiring, power tools, office equipment, etc.	**CARBON DIOXIDE** - cools quickly, leaves no residue. **DRY CHEMICAL** - Penetrates inaccessible areas

4. Oily rags and other flammable wastes shall be kept in covered, metal containers. Such debris shall be removed from shop building as soon as possible and, in no case, shall be left unattended in a building overnight.

5. Cleaning solvents that have flammable properties shall be kept in approved OSHA safety containers having spring-lift caps and heat links. Each container shall be labeled as to its contents.

6. Gasoline utilized in small quantities in shops for fueling engines being repaired, tested, adjusted, etc. shall be handled and dispensed in the small (one gallon)

approved OSHA safety containers, having a spring-lift cap. Container must be labeled as to its contents.

7. The fueling of any type of motorized equipment while the engine is running is prohibited. When transferring flammable liquids make sure the filler nozzle touches the equipment or can being filled in order to guard against the buildup of static electrical charge.

8. Never overfill a tank but rather, underfill it to allow room for expansion of the liquid.

9. No artificial light, except UL approved electric flashlights will be used near escaping gasoline or other flammable vapors or when entering an enclosure suspected of containing gas.

10. Dark places, basements or cellars must not be entered without proper light. The use of matches is strictly forbidden.

11. "NO SMOKING or OPEN FLAMES" shall be enforced in all areas where hazardous substances are stored or used.

12. Exits shall not be locked (chained or otherwise) from the inside.

13. All heavy equipment is to have a fire extinguisher "dry chemical" in cab.

14. Monthly inspections of fire extinguishing equipment should be done by each department.

It is necessary that shops and fixed activities that contain potential fire hazards have a fire plan to combat fire if it should occur. The plan must include: adequate warning measures for alerting all persons in the area of the existence of a fire; rapid reporting to the Fire Department; evacuation of affected personnel from areas involved in a fire; procedures for containing the fire insofar as it is safe to do so and, particularly, only to the extent that it is possible to maintain safe exit for personnel so engaged; instruction of personnel who regularly work there in the duties they are to perform in given fire situations; and adequate fire extinguishing equipment that is regularly inspected by a responsible authority.

Each City of Fond du Lac building is to have an emergency fire and tornado plan. The City of Fond du Lac Fire Department offers a source of knowledge and assistance to department and division supervisors for establishing an emergency fire and tornado plan.

CHAPTER 6 - MATERIAL HANDLING

Analysis of accident records of City of Fond du Lac employees reveal that over one-half of the injuries occur in the process of handling materials.

The types of injuries that have been experienced are strains and sprains, crushing, hernia and rupture, fractures, lacerations, bruises, and contusions.

Accidents of this nature can be avoided by taking a little time to plan ahead, using mechanical equipment wherever possible, and thinking about the proper way to do the task, and the proper tools to use for performing it.

The single and most important preventive safety measure an employee should keep on his mind is the FOUR-STEP LIFTING PROCESS. The technique, putting aside considerations of costly hospital and medical bills, will save you pain and suffering that may extend into your retirement years. Therefore, it is essential that you carefully read and implement the following lifting process:

Lifting Materials

1. **GET READY . . .**

    - Size up the load. If it is too heavy or bulky, play it smart - get help.
    - Check the load and remove protruding nails, splinters, sharp edges, oil, grease or moisture.
    - If the surface is rough - wear gloves.
    - Use of safety shoes is recommended to help prevent foot injuries.
    - Know where the load is going and where you are going to put it down.
    - Be sure the path you take is clear of obstacles.

2. **PICK IT UP . . .**

    - Get a firm footing and good balance; have your feet about shoulder-width apart.
    - If the load is below waist level, bend your knees to get into position. Keep your back as straight as possible.
    - Grip the load firmly.
    - Lift the object to carrying position, keeping it close to the body. Let the leg and arm muscles do the work.

3. **CARRY IT CAREFULLY . . .**

    - Be sure you can see where you are going.

- When changing directions, be careful not to twist your body - turn your body with changes of the position of your feet.

- Use extra caution in tight places so as not to smash your fingers or hands.

4. **PUT IT DOWN . . .**

    - If the receiving surface is about waist high, use the edge to take part of the load. Then push it forward.

    - If you lower the load to the floor, bend your knees, keep your back as straight as possible and the load close to your body.

Lift Trucks

1. Only authorized personnel shall operate lift trucks.

2. Operators must look in the direction of travel and be alert for potential hazards. When empty, travel with forks close to floor.

3. When the truck is unattended the controls must be neutralized, power shut off, brakes set, and forks set within six (6) inches of floor. (Block wheels if parked on an incline).

4. Never refuel with the motor running.

5. Operate only in well ventilated areas.

6. Only the operator may ride on the lift truck, unless a set of handholds are provided for a passenger.

7. Never place arms or legs between the uprights of the mast or outside the running lines of the truck.

8. On grades in excess of ten (10) percent, lift trucks are to be driven downgrade with the load following, and upgrade with the load ahead.

Hoisting Equipment

1. ALL hoists are to have a rated load capacity posted on the exterior of the hoist. Employees are not to exceed the specified limit.

Stacking Materials

1. Have a safe base. That means a solid, smooth, and level surface. If the floor or ground is not level, use dunnage or bearing strips or timber to make sure that pile will not shift. Barrels and other materials that may roll or slide should be crocked at the base.

2. Stack to a safe height, that means not so high the pile will be unsteady, that the floor load limit is not exceeded, and that 18 inches remain between the pile and sprinkler heads.

3. Lock the material by cross-tying the layers so there are no unsteady stacks within the pile. Piles should be also stepped-back to insure stability.

4. Maintain aisle space for workers and fire equipment. Materials should not protrude beyond the face of the pile.

Handling Gas Cylinders

1. Protective cap over the valve should be kept on when the cylinder is not in use.

2. Keep hands away from the oxygen cylinder controls.

3. Lifting cylinders is always a job for two men. If available, move cylinders with a cylinder dolly.

4. Keep cylinders on end, strap or chain them securely so that they cannot fall.

5. Store cylinders away from salt, acids, films, or other corrosive substances.

CHAPTER 7 - PROTECTIVE CLOTHING AND EQUIPMENT

The variety of work operations performed by municipal employees involves many industrial hazards. The tasks performed range from custodial services to heavy construction activities. In all tasks, however, there are counterparts in private industry where much research has been done to develop measures to protect employees from accidental injury. Where possible, this is done by "engineering out" of the hazard. Most commonly, this is done by providing guards for various types of machinery. All machine guards shall be kept in place while machinery is in operation. Tampering with machine guards is prohibited and any removal requires the prior approval of a supervisor. All guards are to be properly replaced after the repair work that necessitated their removal has been completed. When necessary to work on electrically driven machinery, the disconnect switch for controlling the machine shall be secured in the open or off position by the worker or workers performing the job. The securing device should not be removed until the work has been completed and the area has been cleared.

When it is impractical or impossible to place a guard over the source of the hazard, then it becomes necessary to place the guard on the worker. This is done by wearing approved personal protective apparel such as hard hats, safety belts, safety goggles, traffic vests, face shields, gloves, aprons, toe guards, respirators, etc. Supervisors shall insure that all their employees are properly protected. Local dress codes may be established within a particular department, division, or work area, and each employee is expected to know and follow these codes where applicable.

General Clothing

1. For your safety and comfort, invest in work clothes that are sturdy, that fit well, and are washable.

2. The wearing of loose, flowing, or ragged clothing on or near moving machinery or equipment is prohibited.

3. Short-sleeve shirts, tee-shirts or long-sleeve shirts which button at the cuff and have tight cuffs should be worn for operating machinery. Rolled up sleeves are dangerous because they have flapping ends and the added thickness of the cloth can pull your arm into a machine before the cloth tears.

4. Pant legs should be cut to ankle length and cuffs sewn up. Rolled up cuffs collect dirt and are likely to come down and cause you to fall.

5. Steel-toe safety shoes are recommended in all jobs involving handling or moving heavy material. Otherwise wear sturdy, comfortable work shoes. Excessively high-heeled shoes may create a tripping hazard and soft-soled shoes (such as tennis shoes) do not afford protection from puncture wounds when in the field and their use is prohibited while on the job.

6. Shoes with run-down heels or torn soles are hard on the feet and can cause falls. Keep your shoes in good repair.

7. The safe worker does not wear rings, medals, identification bracelets, and other jewelry. Jewelry increases the danger of electric shock and can cause fingers to be badly injured.

8. Work clothes should be washed frequently as a safeguard against skin infections and irritations.

9. Smocks, overalls, and aprons should be worn wherever possible to keep work clothes clean.

10. For outdoor work in winter weather, it is best to wear loose, warm, fairly lightweight clothing. Wear layers of clothing--so you can peel it off for inside work and put it back on when you have to go outdoors.

11. Oil soaked clothes are a serious fire hazard. Keep your clothes free from oil.

Head Protection

Hard hats of the type approved by the department head shall be worn in the following activities:

1. Engineering office personnel while on the job site for any public service construction project.

2. Park Department personnel while on the job site for any park construction project, tree trimming activity.

3. Sewage Treatment Plant personnel when working below ground or below other employees, or in areas where injuries to the head could occur due to low hanging pipe.

4. All Electrical Division personnel while on the job site for construction of street lighting and traffic signal facilities when working with overhead materials. Equipment shall meet approved standards for dielectric properties and shall be the standard type.

5. All Electrical Division personnel while on the job site for installation of traffic control facilities when work is overhead.

6. All Water Department personnel while on the job site for construction of water transmission facilities.

7. All personnel when working below ground, in booster stations, or beneath other employees.

8. Inspection personnel when inspecting work projects involving any of the above conditions.

9. Any other employees when working with or near construction equipment such as digging or hoisting.

10. All personnel working with high voltage electrical hazards (over 600 volts).

11. All personnel engaged in climbing tasks or working from aerial lifts shall wear head protection equipment that meets approved standards for dielectric properties due to the possibility of contacting overhead transmission facilities.

12. Supervisors may designate additional areas where hard hat usage is required as the need arises.

Face and Eye Protection -- YOU HAVE BUT ONE PAIR OF EYES -- THEY CANNOT BE REPLACED -- PROTECT THEM.

The following safety procedures are established:

1. Approved safety glasses shall be worn from start of workday to end of workday except in designated areas.

2. Safety goggles with temple shields shall be worn when:

    - Grinding, cutting, milling or drilling with powered tools.
    - Using impact wrenches and compressed air tools.
    - Chipping, scraping, or scaling paint, rust, carbon or other materials.
    - Using punches, chisels, or other impact tools.
    - Cutting rivets.
    - Cutting or braking glass.
    - Chipping or breaking concrete.
    - Pipe cutting, threading.
    - Using paint remover.
    - Using power activated tools.
    - Soldering.
    - Cleaning dust or dirt from vehicles, machinery, etc.
    - Sandblasting or air cleaning operations.
    - Using metal cutting lathes, shapers, drill press, power hack saw and other metal working tools.

- Using power woodworking machinery, both fixed and portable.
- Tree trimming, brush chipping, or stump removal.
- Steam cleaning.
- Washing vehicle parts with soaps or solvents.
- Working under vehicles.

3. A full plastic face shield shall be worn when handling acids, caustics, and other harmful dusts, liquids, or gases.

4. Spectacle-type safety glasses shall be worn when performing electrical switching operations or activating high voltage circuits where arcs may occur.

5. A face shield with the proper filter lens, or welder's lens, or welder's goggles, shall be worn in all welding and cutting operations.

Electric Arc Welding

a. Welders helmet with proper filter lenses shall be worn.

b. Portable welding screens shall be used to protect the eyes of others in the vicinity whenever potential exposure to others exists.

c. Helpers and observers shall wear safety glasses, goggles, or hand-held shields with the proper filter lenses.

Gas Welding and Cutting:

a. Welder's goggles with proper filter lenses shall be worn.

b. Portable welding screens shall be used to protect the eyes of others in the vicinity whenever potential exposures to others exists.

Hearing Protection

In the variety of activities conducted by municipal work crews, there are some machines or equipment that may produce sound levels in the frequencies which cause hearing loss. When employees are subject to excessive sound levels, attempts should be made to use engineering controls. If the sound level cannot be reduced within tolerance range, then personal protective equipment shall be provided and shall be worn by employees so exposed.

Ear protection may consist of ear muffs, ear plugs, or some of the newer disposable materials. The type most acceptable to employees shall be provided whenever possible, so long as it achieves sufficient reduction of noise exposure. Cotton or waste will not be used as ear plugs.

Foot Protection

The wearing of sandals or canvas sneakers (tennis shoes) in City work areas is prohibited. Wear sturdy comfortable work shoes/boots.

Foot protection is a sound investment for any employee--not only for work activities, but for many off-the-job tasks as well. Following are some of the activities in which safety shoes should be worn:

1. Engineering Office personnel while on the job site of any public service construction or maintenance project.

2. All Street Maintenance Division personnel while on the job site of street maintenance, storm drain maintenance, curb and gutter construction or other public service maintenance projects.

3. Park Department personnel while on the job site of any park construction project, or during ground maintenance activities involving use of mowers, trimmers, and other power equipment.

4. Refuse Collection Division personnel working collection routes or in the disposal area.

5. Sewage Treatment Plant maintenance personnel and plant operators when assisting in teardown of machinery.

6. All Construction Division personnel while on the job site of construction and maintenance of sewers.

7. All Electrical Division personnel while on the job site of installation and maintenance of street lighting facilities.

8. All Electrical Division personnel while on the job site of installation and maintenance of traffic control facilities.

9. All Water Department personnel while on the job site for construction and maintenance of water transmission facilities.

10. All other personnel working near construction equipment.

11. All personnel performing repair shop tasks.

Finger, Palm and Hand Protection

One of the most dangerous human ornamentations to wear in occupational or industrial work is a ring. They should be removed or not worn to work if there is the slightest chance of getting the ring caught in any hook, tool, or piece of machinery. Rings can cause serious loss of fingers or painful lacerations and frequently have to be cut off of fingers if bent in such a manner as to shut off circulation.

Gloves with leather palms should be worn when handling rough-edge or abrasive material or when the work subjects hands to possible lacerations, puncturing or burns. Other hand protection may be designated by authorized persons.

Skin irritation should be prevented by washing with soap and water--not gasoline. Learn to recognize poison ivy and poison oak and avoid it. Rubberized gloves should be worn when handling irritating materials.

Other Protective Equipment

1. High visibility safety vests and/or clothing in fluorescent green shall be worn by all employees in and around any area where there is a danger from street traffic such as patching and maintenance of streets, in and around street excavations, a construction or maintenance area where there is moving machinery or equipment, while surveying on City streets where there is moving traffic, or in any other area designated as "safety vest" area by the supervisor.

2. Class 3 Safety belts with lifelines shall be worn by employees working in closed tanks or spaces underground where worker's position is obscured or where air supply may be inadequate, with an attendant worker stationed outside tending the lifeline.

3. Safety seat belts shall be properly fastened whenever the motor vehicle is so equipped and is in motion.

CHAPTER 8 - HAND TOOLS

Disabling injuries, such as metal chips from mushroomed chisel heads flying in an eye, do happen. Injuries to fingers and hands are a common occurrence.

The following safety rules are established:

1. Select the right tool for the job.

2. Tools with burrs, cracks, mushroomed heads, loose or damaged handles must not be used.

3. Sharpen the cutting edges of the tool and carry the tool with the sharp edge down.

4. Never leave tools in a position where they may become tripping hazards.

5. Sand the wooden handles of a shovel, rake, mall, etc., thus preventing splinters and burns.

6. Check the handle on each tool for tightness.

7. Check the head of each tool such as hammers, chisels, punches, malls, and have the tool dressed if it is mushroomed (includes burrs and chipped edges).

8. Wear shatter-proof clear goggles when using chisels, punches, and wedges. Be sure no one is in the area before using such a tool.

9. Use only properly insulated tools (screwdrivers, wire cutters, etc.) when working around energized electrical circuits or equipment.

10. Avoid using metal measuring tape, fabric tapes containing woven metal strands, rope with wire cord, or other tools and equipment that have conductive properties while around energized electrical circuits or equipment.

11. Return tools to their proper place so that they do not fall from a ledge or are tripped on.

12. Do not leave tools at overhead locations where they may fall and strike someone below.

CHAPTER 9 - POWER TOOLS

Power tools substantially increase the number and types of hazards to an employee. Hazards range from electrical shock of a short circuit to being struck by chips, shavings, and other debris during operation.

Electrical Equipment

1. All electrical tools used in City operations must be grounded by connecting a three-wire cord with polarized, three-prong plug, to a properly grounded, three-hole receptacle, or double insulated. Only when the receptacle is two-pronged is an adapter permissible.

2. If extension cords are used, they must be of the three-conductor type with matching plug and receptacle.

3. Each electrical tool or machine shall be visually inspected each time they are used for damage to cords and ground connections. The most common defects occur at the points where the cord is attached to the tool or where the cord is attached to the plug. Be sure to check for a secure connection that allows for an insulation plate on the inside portion of the plug.

4. Where electrical equipment is used in a wet location, use low voltage or explosion proof GFI protected equipment and wear rubber boots and rubber gloves.

5. Never operate power tools without the guards provided.

Grinders

1. Only those employees who are familiar with the mounting of grinding wheels are permitted to do so. A ring test on each of the new grinding wheels should be completed before installation. (A ring test is made by supporting the wheel freely on a rod through the arbor hole and tapping it lightly with a wooden object. A clear, metallic ring indicates absence of cracks.)

2. Wheel must fit easily on to the spindle. Too loose or too tight is dangerous.

3. When wheel is mounted, stand out of danger at one side while you allow it to develop full operating speed for at least one minute.

4. Apply work gradually to a cold wheel at the beginning of each work period, as cold wheels are most subject to breakage.

5. Never store a grinding wheel on damp or cement surfaces, nor put oily rags on the wheel.

6. Every grinding tool must be securely fastened to the shaft before commencing work.

7. The maximum operating speed as given by the wheel manufacturer is on the wheel label; and grinding wheels are not to be operated in excess of these speeds.

8. The work-rest must be securely adjusted on all stationary grinders to about 1/16 inch of the wheel. Never attempt this adjustment while machine is in motion.

9. Avoid using the side of a wheel for grinding, unless it is especially designed for side grinding. Side grinding weakens the ordinary wheel and may cause it to burst.

10. Use the cutting surface of a grinding wheel uniformly, as a grooved wheel has been dangerously weakened.

11. Grinder bearings must be kept properly oiled and adjusted. This will help to prevent hot bearings and spindles, which are sometimes responsible for melted brushings.

12. Do not abuse the wheel by applying excess pressure.

13. Be particularly careful when grinding narrow tools or other objects as they are apt to catch between the rest and the wheel.

14. The operator's eyes must be protected with goggles at all times when the machine is in use.

Drill Presses

1. Adjust the table so that you have plenty of room for the jig and keep your hands away from the revolving drill. Never run the point of the drill into the table.

2. Be sure that both the chuck and the drill are tight on the spindle, and that any circular tables are tightened before beginning to drill.

3. A sluggish drill is probably the result of incorrect grinding. Be sure the drills are sharpened properly for the particular material, so that the cut may be the right size.

4. Materials shall be clamped or otherwise fastened to the drill press bed, not held in the hand.

5. Never run a drill faster than the rated speed as this may result in broken drills, damaged material and serious injury.

6. It is dangerous to attempt the removal of broken drill pieces with a center punch and hammer. For further details see your foreman.

7. Never leave key in chuck after tightening the drill. If set screws protrude, report it to your foreman.

8. Lower the spindle close to the table before removing the chuck, so that it may not cause any injury or damage to the material as it falls.

9. Reduce the pressure if there is any backlash in the spindle. Listen carefully for the distinctive noise made when the drill comes through work so that you can ease off the pressure.

10. Safety stop must be set to keep the overarm of a radial drill from swinging out where it may cause an injury.

11. The wearing of gloves and loose clothing while operating a drill press is prohibited.

Lathe Operations

1. Lathe tools should be ground so that the chips will break off instead of curl. Only lathe dogs equipped with safety set screws are to be used.

2. Make sure that all gear and belt guards are in place. This includes backgears and ingears, especially.

3. Whenever chucks or face plates are changed, they must be started on the spindle by hand power. Keep hands off chuck rims when lathe is in motion.

4. After adjusting a chuck, be sure to remove the chuck wrench immediately. See that the tailstock toolholder and material are properly clamped before turning on power.

5. For external work, never set the lathe tools below the center of the work being turned.

6. Use a brush to remove chips. Do not use compressed air.

7. Wear only short sleeves when filing on a lathe. When near the chuck end or head stock, file with the right hand over the lathe stock instead of the left hand, holding file in such a position that in case it is forced back, the hand will not be forced against the body.

8. The operator's eyes must be protected with goggles at all times when the machine is in use.

Compressed Air & Power Washers

Cleaning with compressed air:

The use of compressed air for cleaning purposes is prohibited. Brushes should be used for cleaning machinery. Compressed air and power washers can be dangerous. Horseplay with equipment is prohibited.

Air Hammers

1. Disable air hammer before laying it down--or whenever it is not in use--to avoid the danger of it flying out and striking someone.

2. Always close the valve on the air line and release the air from the hose before cleaning, repairing, trying to insert any tool, or leaving any air powered unit.

3. Maintain your hold securely on the handle on an air motor to prevent it from flying around and striking you.

4. Be sure that the discharge end is made secure before releasing compressed air into a hose so that it will not swing around and cause injury.

5. Hearing protection in the form of an ear muff is required; the use of safety goggles is required; and the wearing of steel-toed shoes is highly recommended.

Woodworking Machinery

1. Machine guards are to be permanently attached.

2. If you are running short or narrow stock, protect your fingers by using a block.

3. Before using a circular saw, check all materials for possible warping. If a concave edge is found, always place it away from the straight-edge guide of the table saw.

4. If the saw binds in a cut, the saw must be shut off before attempting to dislodge the lumber.

5. A rip saw shall not be used for cross cutting; nor shall a cross-cut saw be used for ripping.

6. Learn to stand out of the line of a possible "kick-back" and to avoid the danger of being struck by the small pieces that are frequently thrown from a circular saw.

7. Never reach over any machine to get finished materials from the opposite side, to remove dust or wood particles from the saw table, or to oil the machine while it is in operation.

8. In using a joiner, never allow either hand to pass over the knife. Use both hands--one on each side of the material--using particular care at the start and finish.

Gas Welding

1. All gas welding equipment and connections should be kept free from grease and oil. (Oxygen will explode upon contact with oil or grease.) Oily and greasy gloves may bring about the same effect, besides making it difficult to handle the cylinders.

2. Never roll tanks on the floor, nor attempt to carry them by hand or hoist unless properly slung. Use the skid provided when unloading cylinders from the truck. After unloading tank, the cylinder must be securely chained.

3. Securely fasten with a chain the acetylene and oxygen tanks in an upright position where there is no danger of their falling or being bumped.

4. Use only standard green oxygen hose with right-hand couplings, together with red acetylene hose with left-hand thread.

5. Blow out the tank valve before attaching the regulator. Never use compressed air for blowing out equipment as air may contain some oil and moisture. Use oxygen to blow out the oxygen hose and acetylene to blow out the acetylene hose.

6. When changing empty tanks for full ones:

    a. Shut off valve on empty tanks.

    b. Release thumb screw on regulator.

    c. Disconnect regulator, blow out tank valve and connect on full tank.

    d. Stand on opposite side of tank, point the acetylene valve outlet away from the oxygen tank and face away from the gauge while opening the tank valve.

    e. Adjust thumb screw on regulator to proper pressure, making sure that you do not have excess oxygen, which only causes unnecessary sparks in operation.

7. Be sure that the end of your torch is cleaned before attempting to light. Use only friction lighters.

8. Do not put the materials in such a position as to permit sparks, hot metal, or the severed section of metal to fall on the gas supply hose or the feet of any employee.

9. At the completion of the work, the welder shall make a careful inspection of the job site to insure that hot articles have not started smoldering which might later develop into a serious fire.

10. Proper goggles and gloves shall be worn. Employee should wear steel-toed shoes.

Electric Arc Welding

1. Whenever possible, welding operations should be carried on inside a regular welding booth. If work must be performed outside a booth, the arc shall be effectively screened to prevent injury to eyes and others.

2. Before entering the welding area, an effective warning, such as shouting, shall be given, so that the operator may be aware of your presence and help you to avoid a sudden flash or other injury.

3. Like the welding operator, the person entering the welding area is to also wear required eye protection.

4. The welding of galvanized material requires the operator to protect himself with a blower and/or exhaust fan.

5. Deposit short ends of welding rods in containers provided for that purpose, to prevent burning holes in your shoes or starting fires.

6. When not in use, place the electric holder where it cannot cause an arc.

7. Prevent injury to yourself and others from short circuits by only using welding cables that are in good condition.

8. Only properly authorized operators shall use welding equipment. Never attempt to repair welding equipment yourself.

9. Helmets and shields will be used with all electrical welding. Do not remove your helmet while bending over a hot weld.

Tree Trimming and Chain Saw Safety

1. Before starting any tree operations, time should be taken to check the trees in the surrounding area for any dangerous conditions.

2. Tree work should be avoided when trees are wet, during high winds, or during extreme low temperatures in cases of emergency.

3. Tree trimmers should ask for assistance only from employees on the crew, never from bystanders.

4. Danger signs and barriers will be placed around areas where tree work is to be done.

5. The foreman is responsible for: instruction to his employees; inspection of tools; enforcement of all safety rules; suitable clothing should be worn as determined by the foreman.

6. Ropes of a suitable strength should be used for lowering of large limbs.

7. Ropes shall be used for raising and lowering of tools.

8. Safety or climbing ropes should not be used for lowering of limbs.

9. Ladders should not be used unless they can be set on a firm foundation.

10. Ladders should be frequently inspected for damage. All additional safety rules of Chapter 12, regarding ladders, are to be adhered to.

11. Trimmers should always call a warning before dropping limbs.

12. Never leave hangers or tools in a tree over lunch hour or overnight.

13. Special precaution should be taken when it is necessary to work around live wires.

14. All wires broken during tree work should be reported to the proper utility company.

15. Fallen wires should be guarded until servicemen arrive.

16. In case of contact with live wires, do not touch the victim. The employee must be separated from wires by use of nonconductive materials. Call an ambulance at once.

17. For removal operations, fall ropes are used to guide fall of large trees. Once the notching has started, tree must not be left unguarded.

18. Only one-man saws should be used in a tree. All chain saws should be roped with their own rope using either a taut-line hitch or a groundman to hold the rope.

19. Walk with the saw stopped and the guide bar pointing to the rear.

20. Never walk with the power saw running.

21. Always stand at the end of the saw when cutting, never at the side.

22. Avoid using the tip of the saw for cutting.

23. Never replace chain in guide rail groove while motor is running.

24. Clean and check saw thoroughly and lubricate daily as required. Maintain a proper tension on the chain. Always inspect the saw for sharpness, as a sharp saw will reduce maintenance cost, and result in faster, safer, easier cutting.

25. Refuel the saw before it runs out of gasoline to avoid a "bound saw" which is difficult to refuel and start; and to avoid the danger of fire when starting a saw at the refueling site.

26. Hard hats and safety glasses are mandatory, steel-toed shoes should be worn.

Lawn Mowers

1. Power mowers will not be left unattended with motor running.

2. Area to be mowed must be inspected for foreign objects. Wire, stones, bottlecaps, sticks, etc., should be removed before mowing.

3. Bystanders should be warned by the operator of the danger of flying objects. Extreme precaution must be taken when there are children in the immediate area.

4. Operator must keep hands and feet away from the undercarriage of the mower.

5. During maintenance repairs, cleaning, or when refueling, the spark plug wire must be disconnected from the spark plug.

6. Operators of power mowers shall wear approved work boots.

CHAPTER 10 - CONSTRUCTION SAFETY, ABOVE GROUND AND UNDERGROUND WORK

Municipal employees are often involved in tasks related to heavy construction industry. Heavy machinery is employed in public works projects to save time and labor, but potential hazards to inexperienced or untrained workers are multiplied in the process. The operators of construction machinery often do not have sufficient visibility to detect danger to nearby workmen, or the ability to avoid an accident by quick reversal of controls. The machinery is designed to handle extremely heavy work and usually does. Being struck by or caught in or between such machinery and its loads usually inflicts severe injuries.

Other public utilities are often installed in or near the worksite area of projects to be completed by City employees. Contact with, or damage to, the other utilities may affect the safety of the workmen on the job, the safety of the general public, or interruption of essential utilities services. Following is a list of most of the utilities a City employee must consider at job sites in the Fond du Lac area or fringe areas adjacent to other governmental units.

Cable TV	Gas Company	Storm Drains	Traffic Signals
Electric Company	Sewers	Street Lighting	Water Works
Fire Signals	State Highway Department	Telephone Company	Western Union (ADT)
Fond du Lac County DPW			

The daily familiarity with these services may make even experienced employees treat them too lightly until there occurs a gas explosion, an electrocution, a cave-in, or loss of a vital communication service. Frequent work in a particular area may lead employees to believe they know what other services are there. The rapidly changing demands of today's society leave no room for such assurance. Recent changes may have been made. This attitude must be consciously avoided at all times. Safety precautions must be a part of job planning. Overhead lines constitute a hazard that must be considered when operating machinery beneath them. Underground services constitute many hazards when damaged in a dig-up.

The most immediate danger to workmen lies in contact with electric service or rupture of a gas service. Such accidents can be prevented by advance planning. But, if they should occur, prompt reporting to the utility concerned is of prime importance. Escaping natural gas constitutes an explosion potential and the leak must be stopped by trained personnel as soon as possible. Contact with a primary electrical circuit constitutes a shock hazard. If an injured employee is still at the point of contact or rescuers are attempting to remove him, the reactivation of the circuit poses additional hazards. An immediate report to the utility affected will avoid compounding the hazard.

Some of the principal hazards affecting employees and/or public safety are:

- Dig-ups resulting in gas explosion, electrocution, flash burns, etc.
- Rupture of gas, water, and sewer facilities from using mechanical compaction, boring, or digging equipment.
- Electrocution resulting from contact with overhead electrical wires.

- Interruption of electrical service or communication lines from dig-ups, pole collapse, etc.

- Fractures, contusions, crushes, etc. from being struck by or caught in materials and/or machinery.

- Fractures, strains, dislocations, etc., from cave-ins.

- Strains from lifting and materials handling tasks.

- Eye injuries from dust and debris propelled by machinery and tools used in the operations.

Construction accidents can be prevented by constantly including consideration of necessary safety precautions in planning every job, coordinating with other utilities to locate services near the job site, instruction of workers about hazards involved as each job is explained to them, use of approved protective clothing and equipment, and adherence to approved safe job procedures.

The following safety procedures are established:

BEFORE WORK IS STARTED, a supervisor shall:

1. Check plans to see what public utility services are located on or near the job site area.

2. Contact Digger's Hotline and other public utilities having services in this job site area to secure assistance in locating and protecting all underground or overhead services that may be affected.

3. Make a personal inspection of the job site area to identify what signs, post markers, overhead electrical lines, etc., may be seen and make this information known to his workers.

4. Obtain the service and repair telephone number of all utilities having services in the job site area, so that an immediate report may be made to them if an accidental contact is made.

Natural Gas Service

1. Inform all crew members of locations and depths of buried pipelines.

2. Consult the local gas utility of closely paralleling or crossing buried pipelines.

3. Specifically instruct equipment operators to avoid contacts with buried lines. Do hand digging when in close proximity to buried pipelines.

4. Do not use mechanical compaction equipment when backfilling over buried pipelines.

5. Do not use drop-weight type concrete or frost breakers over buried pipelines.

If a Gas Pipeline is Damaged

6. Immediately call the Fire Department and gas utility service and repair office to report the damage.

7. Shut off all motors in the area.

8. Remove all flares, lanterns and open flames.

9. Enforce **NO SMOKING** in the area.

10. Do not cover up a damaged pipeline.

11. Do not operate gas valves.

12. Check buildings in the immediate area for gas odors.

13. Request occupants to leave the immediate area and also downwind area in cases of escaping gas.

14. Reroute traffic from the immediate area and notify the Police Dispatcher and Director of Public Works of the situation.

15. Stay near the area until relieved by police or gas company personnel.

Electrical Transmission Service

1. Contact the local electric power utility if work is to be done near electric service and accurately locate any buried service.

2. If excavating near poles or guide wires and the possibility of damage to cables or collapse of a pole line exists, consult the power company.

3. If excavating beneath buried conduit or cables, arrangements shall be worked out in advance with the power company concerning maintenance of electrical services, proper support of exposed conduit, and suitable compacting of backfill.

4. All wires and conduit shall be considered energized and dangerous.

5. Booms and protruding parts of construction machinery shall not be operated closer than ten feet (10') from overhead electrical lines. When construction machinery is operated in close enough proximity to energized lines that a full traverse of the moving parts could result in contact, a signalman shall be provided to direct the operator. Signalmen in those circumstances shall be especially watchful to prevent movement of the machinery any closer than the minimum ten-foot (10') clearance prescribed above.

6. Employees on the ground handling suspended loads, slings, cables, or in contact with the machine, are in the most hazardous position if contact with energized electrical lines occurs. Ground crews shall be repeatedly warned of the hazard and especially watchful to prevent such contact.

If Machines Contact Energized Wires

7. Immediately contact the power company service and repair office.

8. The operator should attempt to swing the boom clear.

9. Persons on the rig are usually safe. If necessary to leave the rig, jump entirely free, being careful that no part of the body is in contact with the machine and the ground at the same time.

10. When jumping clear of energized equipment, aim for dry ground.

11. Once clear of energized equipment, do not return to it and keep others away from it.

12. If wires are down, post guards to prevent anyone from touching them.

Telephone Service

1. While telephone circuits operate on low voltage and are not an electrical hazard in themselves, they may be energized with higher voltages when crossed with power lines by accident at points far removed from the job site. Consider ALL lines hazardous.

2. Do not cut or disturb guide wires. Sudden release of tension may cause an entire pole line to collapse.

3. Observe the precautions listed for electric power lines.

4. Underground telephone cable is generally buried with a minimum cover of 24 inches. Subsequent grading may have reduced this minimum. Pipe pushers, trenchers, boring tools, air hammers, pins for paving and curb forms, etc., should not be used until determining the depth and location of buried telephone cables and conduit.

Digging and Trenching Operations

1. Approved guards such as barricades, warning signals, or flagmen shall be in place when workers are engaged in any street excavation or street repair work, or when removing or replacing manhole covers. Warning devices shall be placed a sufficient distance ahead of the work to permit vehicles a reasonable stopping distance with due regard for visibility, speed, and volume of traffic. Open manholes shall be properly guarded with approved warning devices.

2. A signalman shall be posted on the surface to assist the machine operator. The signalman shall station himself where he can be seen by the operator, outside the range of movement or hazardous area from loads, and warn the operator of the presence of others who may enter that area.

3. Manhole covers not provided with lifting devices shall be raised slightly on one edge and slid off the hole. To replace the cover, reverse the procedure.

4. All tools, materials and equipment shall be kept at a reasonable and safe distance from the edge of trenches, curbs or embankments.

5. Shoring of trenches shall commence at a depth of five feet (5'). Earth banks more than five feet (5') in depth, when not shored or braced, shall be sloped to a safe angle. Excavation work shall be under the supervision of someone with the necessary experience and authority to modify the shoring and method of excavating as necessary to insure safety. Excavations less than five feet (5') shall also be guarded when hazardous ground movement may be expected.

6. Workmen in an excavation that is properly sloped or shored should not be in danger of being buried by a cave-in. However, accidents have occurred where workmen standing on the surface at the edge of an excavation were carried into the excavation and buried by a cave-in at the point where they were standing. If such an accident should occur, pull the hard hat over your face to trap a pocket of air.

7. Prevention is the best insurance. To avoid the situation described in No. 6, note the texture of the earth being removed. If it is unstable (sand, loose fill, etc.), warn all workers against working too close to the excavation before shoring is installed.

8. Hard hats shall be worn at all times by workers in or around excavations, trenches, tunnels, sewers, or other sub-surface operations and job sites. Hard hats shall also be worn when any overhead machinery is in operation.

9. When chains, ropes, cables, slings, etc., are placed under tension, warn workers and observers to stay beyond the range of whipping strands if they should part from the tension.

10. The public shall be kept at a minimum of fifty feet (50') from hazardous areas, material piles, and heavy equipment.

Materials Handling Machinery

1. When moving heavy objects with any equipment, use the proper slings and grips to secure the load to be suspended.

2. When guiding a suspended load into position, always use non-conductive rope or nylon tag lines to permit maintenance of a safe distance from the drop zone in case a suspended load should fall, or contact with an electrical service should occur.

3. Never crawl under mobile construction machinery during rest or lunch breaks.

4. Avoid moving a suspended load over persons on the ground, or above persons working in an excavation.

5. When moving suspended loads over or near persons, certified chains, etc. shall be used.

Aerial Platforms and Baskets

City employees use several kinds of mobile equipment that provide platforms or baskets on which they are mechanically lifted to work on things too high to reach from the ground. This equipment is used by linemen, tree trimmers, and in various public service maintenance tasks.

The hazards involved are:

- Contact with electrically charged overhead wires
- Falls
- Dropping tools and other objects upon workers below
- Being caught in, on, or between equipment parts

Extreme care must be exercised when operating this equipment near overhead lines. With certain exceptions, aerial platforms or baskets should not be positioned closer than ten feet (10') to overhead lines. The exceptions are:

1. Electrical Division employees who must work on overhead lines.

2. Employees in the Electrical Division who must service traffic signal installation.

Falls can be prevented by use of adequate and appropriate safety equipment. A raised platform or basket becomes a highly unstable support if jarred by a collision with the base vehicle, or jerky operation, or failure of mechanical controls. Prevention of falls is achieved by using a safety line, strong enough to support the weight of the employee using it, secured to the employee and to the boom or platform.

The equipment used by City crews has controls located in various parts of the basic machine to operate the outriggers, booms, power take-off, etc. There is little standardization, even on equipment of the same general type. The operator who activates such controls should make sure that all persons in the vicinity of this equipment are clear of any moving part before power is applied. The supervisor or lead man in charge of the crew is responsible for insuring that this precaution is taken and that appropriate warning is given.

The following safety procedures are established:

1. Always lower outriggers before raising the basket on rough or even ground. (Most equipment now in use is equipped with an interlock which prevents raising the basket until outriggers are down.) When outriggers are not used, there shall be two (2) employees assigned to the vehicle.

2. Give verbal warning to persons near the vehicle when lowering outriggers if an automatic audible signal is not operative.

3. When working aloft in aerial baskets or platforms, a safety line shall be connected to a fitting or harness secured to the platform, basket or boom, and to a safety belt or harness worn by the employee.

4. When operating aerial baskets or platforms, hard hats shall be worn.

Working in Public Right of Ways

Municipal employees are often required to work in or alongside right-of-ways normally used for vehicle or pedestrian traffic to repair utilities service, or perform tree trimming or landscaping tasks, and other maintenance activities. It is desirable that, whenever possible, some continued flow of traffic be maintained with the least possible interference with normal traffic patterns. There are two safety considerations involved: 1) protecting employees from being struck by vehicular traffic, and 2) helping the using public to safely avoid hazardous obstructions, excavations, etc., that interrupt the flow of both vehicle and pedestrian traffic.

When road surfaces are being repaired, manholes opened, or excavations dug, it is necessary that adequate warning of the hazard be posted, that a minimum amount of the right-of-way be blocked off consistent with safety requirements, and that traffic be efficiently rerouted.

If repair work obstructs a traffic lane in a street and thus compresses several lanes of traffic into fewer lanes, warning by signs and barricades must be given to motorists well in advance of the obstruction. If manhole openings and excavations constitute a hazard to pedestrians, then adequate barricades and rerouting of walkways must be provided.

Maintenance activities may include such minor interferences as tree trimming, curb-site planting, street sweeper operations, trash pickups, light fixtures cleanings, traffic signal repairs, etc. They may interfere with normal traffic in the form of standing or slow-moving vehicles and equipment, or occasional movements into the normal right-of-way. The feature of simultaneous flashing of all turn signal lights should be used, augmented by oscillating or rotating lights, or flashing arrow signs mounted on the vehicle. For minor construction or maintenance operations requiring fifteen minutes or less, the work vehicle itself with high visibility color or reflective markings mounted on the vehicle and warning lights described above, will usually be adequate.

When maintenance or construction activities exceed fifteen minutes duration, adequate signs and barricades shall be set up.

The following safety procedures are established:

1. No City street shall be completely closed for any utility repair work without adequate notice to the Police and Fire Departments.

2. If an open cut is left in a posted traffic lane when work is stopped or suspended for any reason, a steel plate cover, of sufficient strength to sustain normal traffic loads should be placed over the cut and anchored. If a cut cannot be covered and must be

left overnight, signs and barricades shall be left in place, adequate lighting shall be provided.

3. Mobile equipment used for maintenance and repair work in City streets shall be equipped with flashing or rotating lights.

4. When a portion of a street has been closed for maintenance and repair work and construction equipment must be intermittently operated in lanes left open to traffic, a flagman shall be provided to control traffic.

5. Any obstruction of a public right-of-way by City work crews for maintenance and repair work exceeding fifteen minutes duration shall be signed and barricaded according to basic traffic warning principles.

Traffic Warnings

1. Protection of hazards such as large holes, soft patches, material piles, equipment, etc.

a. Place signs (plus blinkers at night) 300 feet in advance of hazards.

b. Mark material piles, equipment, etc. with pylons during the day and reflective barrels at night.

c. Protect holes and patches with approved reflective devices at the hazard and add blinkers at night.

d. No gravel windrow shall be left in the middle of the road at night.

2. The employee in charge of work requiring the lighting of a barricade shall:

a. Make sure the blinkers are operating properly.

b. See that the lights are properly placed and adequate for the job. At least two lights will be required when a road is barricaded.

3. Removal of temporary signs:

a. Signs placed solely for the protection of workers ("Men Working", etc.) shall be removed at the end of the day's work.

b. Signs placed to warn of temporary hazards ("Bump", "One-Way Traffic", etc.) shall be removed as soon as the hazard has been eliminated.

4. Protection of workers working on roadway:

a. "Men Working" signs shall be placed approximately 300 feet in advance of the work in both directions, except that in crack-filling operations, the

signs may be mounted on a skid and dragged not less than 200 feet behind the tar kettle.

b. Work shall be done on one-half of the roadway at a time when patching and/or filling cracks, etc.

c. Flagmen shall be used where the amount or speed of traffic warrants and where state and local laws apply.

5. Flagmen should:

a. Stand near enough to the workers being protected so there is not doubt as to his purpose.

b. Stay not less than 200 feet from the workers unless conditions make this impossible.

c. Stand on the shoulder, to the right of approaching traffic.

d. Stop and slow paddles shall be used when appropriate.

e. To stop traffic:

1) Hold paddle stationary until the car has stopped.

2) Try to make eye contact with driver.

3) Speak to the driver, if necessary.

f. To slow traffic:

1) Hold paddle stationary until the car has slowed sufficiently.

2) Give signal to proceed with free hand.

6. Flagging traffic at night:

a. Use a bright red lantern or fuses.

b. To stop traffic, wave the light back and forth until the vehicle has stopped.

c. Give the signal to proceed with your free hand or by speaking to the driver.

CHAPTER 11 - WORKING IN A CONFINED SPACE

Only qualified City employees may be required to perform work in areas that are defined as "confined spaces", under state and federal laws. Because work in these areas can present special safety problems, the state has passed specific laws which mandate certain precautions which must be taken before employees enter a confined space.

These laws were enacted because of serious injuries and fatalities which have occurred when employees have entered confined spaces with contaminated air. The procedures outlined in this section are in compliance with state requirements, and it is critical that employees adhere to them strictly when entering a confined space.

Under state law a confined space is defined as "an environment which by design or construction has limited openings for entry and egress, has unfavorable natural ventilation, could reasonably be believed to have dangerous air contaminants or contain materials which may produce dangerous air contaminants, and is not designed for human occupancy. Confined spaces include but are not limited to, storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, manholes, sewers, tunnels, underground utility vaults, and pipelines, but do not include heating system tunnels and vaults." Only trained and authorized personnel should enter a confined space.

Most confined spaces are easy to identify. Others may not be. For example, storage tanks with open tops may still contain hazardous gases which are heavier than air and have settled to the bottom of the storage facility. Employees should always exercise caution, and if in doubt regarding whether a work area classifies as a confined space, seek assistance from their supervisor or follow the procedures outlined in this chapter until you are certain the area is safe. You should be particularly cautious if there are foul or unusual odors coming out of the work area.

State law basically requires that employees take the precautions listed below before entering a confined space:

- Sampling the air within the confined space to determine if the air quality is within acceptable safe limits prior to entry.

- Continuous monitoring of the air while in the confined space.

- The use or availability of specific rescue equipment, a hoist, ropes, respirators and communications system and the presence of a back-up person when an individual is in a confined space which may have dangerous air contaminants or materials which may produce dangerous air contaminants.

Procedures for Entering and Working in a Confined Space. The City requires all qualified employees to follow the procedures outlined in this section before entering and while working in confined areas. Failure to comply with these procedures could result in serious injury or even death of employees involved. Employees and their supervisors found not complying with these procedures will be disciplined. The procedures outlined in this section are for the safety and well-being of employees and must be strictly adhered to.

Sampling. The first step which must be completed prior to entry into a confined space is sampling of the air within the confined space. This is accomplished with sampling devices specifically designed for this purpose. Air sampling devices are available from your supervisor. You must be trained in the proper use of the device before you take it into the field. Your supervisor or other qualified personnel will provide this training before you are allowed to use the device.

The sampling device will simultaneously test for hydrogen sulfide, oxygen, carbon monoxide, and combustible gases. The sampling devices are equipped with audible and/or visible warning devices which will indicate when the atmosphere of a confined space is considered hazardous for human occupancy. Specifically, the sampling device will be triggered if the atmosphere of the confined space:

1. has an oxygen content less than 19.5% or over 23.5%;

2. a hydrogen sulfide content of 10 parts/million or more;

3. a combustible (explosive) gas content of 10% or more of the lower explosive limits; and/or
4. carbon monoxide contents of 35 ppm or more

5. other toxic substances which may be present at levels beyond safe exposure limits.

Sampling devices must be carefully maintained. You should use only sampling devices that are given to you by your supervisor or by staff trained in their maintenance. When you are through with a sampling device, it should be returned to authorized staff.

Those people assigned to maintain sampling devices shall do so according to the standards listed below.

The sampling device must be:

1. Calibrated to the oxygen content of the ambient air at the time of the sampling. Calibration of the sampling device relative to the oxygen content shall be performed where the 20.9% natural content of oxygen in the air is most likely to occur.

2. Calibration of sampling devices for combustible gases shall be conducted as often as necessary but no less than once every six months with a standardized combustible gas.

When using a sampling device in the field, you should:

1. Either a non-sparking probe attached to the sampling device or the sampling device itself should be used to sample the atmosphere of a confined space. When entry to a confined space is by means of a manhole, the probe shall be inserted through the pick hole of the manhole cover or the cover should be pried open on the down-wind side just enough to allow insertion of the probe.

2. The atmosphere should be sampled at various levels to ensure there are no pockets of gas or other substances near the top or at the bottom of the confined space. The probe should be lowered 1 foot every 30 seconds.

3. Sampling of the atmosphere of a confined space for toxic substances must be done by the use of a multi-gas detector, such as the type furnished by the City.

4. When leaving point of entry over 10 foot radius, employee should have monitor on person.

The testing of the atmosphere of the "confined space" will determine whether it is safe for entry and under what conditions. A "confined space": is classified as either a Level 1 or Level 2 "confined space" depending on the atmospheric conditions within the confined space. The procedures for entry into a Level 1 "confined space" vary from those for a Level 2 confined space. It is important for employees to adhere strictly to the entry procedures for both levels.

A Level 1 confined space is defined as:

Level 1 Confined Space: The air quality of the "confined space" falls within safe limits. The atmosphere has:

1) An oxygen content less than 19.5% or over 23.5%.

2) A hydrogen sulfide content of less than 10 parts/million.

3) A combustible gas content less than 10% of the lower explosive limit.

4) Carbon monoxide at 35 ppm.

5) An exposure level for any toxic substance which is not beyond safe limits.

The City does not allow employees to enter Level 2 confined spaces. If the sampling device you are using is triggered when you test the atmosphere of a confined space, do not enter. If you are not sure if a confined space is Level 1 or 2, check with your supervisor before entering.

These precautions are outlined for your safety. Whenever entering a confined space, follow the appropriate procedures outlined in this section. If you are not certain if an area is a confined space, call your supervisor--don't take a risk.

Level 2 Confined Space: The air quality within the "confined space" does not fall within safe limits as indicated by the sampling device or may become contaminated while the employee is occupying the confined space. A Level 2 confined space: **Immediate danger to life and health DO NOT ENTER!**

When entering a Level 1 "confined space", the following procedures shall be followed:

1. There shall always be two employees present. Both employees must possess a valid card in Cardiopulmonary Resuscitation (CPR) and Multi-media First Aid.

2. One person must remain outside of the confined space and act as an observer while the other person is in the "confined space".

3. All persons entering a "confined space" must monitor air quality in the employee's immediate work area. Air quality must be monitored continuously while the employee is in the confined space. Forced ventilation of the area may not be used in lieu of monitoring devices.

4. Persons in the "confined space" must immediately exit the confined space if the audible alarm and/or the flashing lights on the monitoring device are activated. The area now automatically becomes a Level 2 confined space and cannot be re-entered until the procedures outlined in the next section are complied with.

5. Any person entering the confined space must shut off and lock out any machinery, pumps, or other mechanical devices which are located in the confined space. If possible, remove residues or sludges in the confined space which may release harmful gases before entering.

6. If there is a chance that flammable fumes and gases may become present in the confined space, employees must use spark-proof clothing and/or tools. All light sources within the confined space shall be explosion proof or low voltage. If at any time the alarm limits for combustible gases have been exceeded, the area should be vacated immediately and cannot be re-entered under any conditions until levels of combustible gases present have been restored to safe limits.

7. Employees must wear hard hats and safety glasses at all times when working in a confined space. Other personal protective equipment may also be required such as respiratory protection, face protection, ear plugs or muffs, and rubber gloves and boots depending on the nature of the work to be performed.

8. If welding is to be performed in a confined space that contains or did contain combustible materials, all residues including dry seals must be removed before welding operations begin.

9. In case of an emergency, the observer must radio for help immediately and wait for assistance. Do not enter the confined space.

10. Entrances to confined spaces which are located in streets shall be guarded in accordance with the following:

    a) Vehicle's 4-way flashers shall be activated.

    b) Parking the vehicle in such a way that traffic flows in and where possible, the vehicle shall provide protection for the employee.

    c) Vehicles' exhaust fumes shall not enter the confined space.

d) Barricades should be placed around the area and it should be marked with traffic cones when working on streets or other areas where traffic may present a hazard.

e) Traffic safety vests shall be worn when working in the streets or easement surface in the field.

13. Smoking is prohibited within a twenty foot (20') radius or inside of confined space.

14. Fall protection should be used as needed.

15. If the atmosphere is unsafe (i.e., alarm on testing device is triggered), before entry is attempted, an attempt should be made to bring the air quality of the area into the safe limits defined for a Level 1 confined space. The area must be properly ventilated. This can be done through the use of a portable air blower or fan. Locate the blower itself in an area that is free of contamination. After ventilation, follow-up testing should be done to insure a safe atmosphere exists and the area should be continuously ventilated while employees are working in the area.

a) The employee entering the confined space must wear a Class 3 safety harness which is attached to a lifeline attached to a winch and/or a fall arrestor.

b) There must be at least one additional trained observer located outside the confined space who shall control the lifeline and maintain communication with the employee inside the confined space. The observer must contact the employee inside the confined space at least every five minutes by visual signals, voice contact, or predetermined lifeline signals. Oath as shown below:

1. OK - 1 tug
2. Advance - 2 tugs
3. Take up Slack - 3 tugs
4. Help – 4 tugs

c) The observer must radio for help immediately in case of emergency and not attempt a rescue.

d) The observer must never leave his post unless he is relieved by another trained observer or has one person in the confined space come out until he returns.

CHAPTER 12 - LADDERS AND SCAFFOLDING

Electrocution and free falls are the two most critical types of injuries on ladders and scaffolding. Other hazards include: splinters, slivers, and slips resulting in sprains and strains, bruises and abrasions.

The following safety procedures will prevent accidents and possible injury:

Ladders:

1. Ladders shall not be used in the vicinity of electrical lines and equipment.
   a. when used in working in and around electrical, use a fiberglass ladder.

2. Periodically inspect ladders.

3. Wooden ladders or scaffold planks should not be painted as defects may be covered by paint. Use a good grade of spar varnish or a mixture of linseed oil and turpentine to preserve the wood.

4. Nonskid feet shall be used on all straight and extension ladders.

5. Straight ladders form a triangle when placed against the wall or objects for climbing. When properly placed, the bottom side of the triangle should be about one fourth as long as the vertical; i.e., if the ladder is leaned against a wall eight feet (8') high, the feet should be set two feet (2') from the wall. Ladders shall never be placed against window sash.

6. When using a straight ladder, it should be long enough to extend at least three rungs above the level to which the user is climbing. Stepladders must not be used as straight ladders; they are not designed for this purpose.

7. If the bottom of a ladder is placed on an unsecure surface, secure the ladder in a position by the use of hooks, ropes, spikes, cleats or other anti-slip devices or by stationing an employee at the base of the ladder to hold it in position during use.

8. Never stand on the top step of a stepladder to work.

9. Only one person shall be on a ladder at a time.

10. Never carry articles in hand while climbing. Use a hand line to raise and lower tools and materials, or suspend them suitably in a tool belt.

11. Always face a ladder when ascending or descending it and have free use of both hands.

12. Clean muddy or slippery shoes before climbing.

13. Keep rungs clean and free of grease and oil.

14. If it is necessary to place a ladder near a door or where there is potential traffic, set up warning signals or take other precautions to prevent accidental contact that might upset the ladder.

15. When using an extension ladder or straight ladder to climb poles, trees, or circular structures, the ladder shall be provided with factory-made equipment to properly support ladder against the object being climbed.

Scaffolding:

1. Proper supervision is required to erect scaffolding.

2. Planks and other material used in building scaffolding must be sound and free from knots. Keep planks in good condition with a spar varnish (never paint the planks).

3. Planking shall be adequately cleated; the scaffolding over twelve feet (12') should have toe boards; if over eighteen feet (18'), the scaffolding should have hand rails.

4. Tools on top of the scaffolding are liable to fall and injure someone. Keep tools in a bucket or box lashed onto the scaffolding.

5. When possible, secure scaffolding to a fixed object.

CHAPTER 13 - MOTOR VEHICLES AND MOBILE EQUIPMENT

City vehicles are easily identified as such and, thus, constitute a traveling advertisement seen by many citizens. In our relationship with other motorists and pedestrians while operating City vehicles, we control an important influence upon good or bad public relations with the City. By courteous, considerate driving habits, we shall build good public relations if we apply the principles of defensive driving to avoid accidents. The following safety procedures are established:

1. All employees shall be responsible for a safety check EACH DAY of any vehicle or mobile equipment they are assigned to drive.

2. Safety checks shall include:

Lights	Power steering and fluid reservoir
Horns	Windshield washers and wipers
Directional signals	Tires
Brakes & brake fluid	Clutch travel
Motor oil	Hydraulic systems

   (Brakes shall be tested by putting the vehicle in gear and applying the brakes to bring it to a stop.)

3. Position all adjustments for safe driving before putting the vehicle into gear such as seat, inside and outside mirrors, and sitting positions.

4. Drivers of City vehicles must possess a valid Wisconsin Driver's License or CDL where required, and they must be thoroughly familiar with the state and local regulations governing motor vehicle operation. The fact that an employee is operating an emergency vehicle does not absolve the employee from civil or criminal liability for the consequences of reckless driving. The driver must be in the position to satisfy a jury that reasonable care and prudence was used in operating emergency vehicles. Even though emergency equipment has warning devices, the drivers are expected to PROCEED WITH ALL CAUTION.

5. All slow-moving equipment operated in public right-of-ways shall be equipped with a triangular-shaped reflecting sign in accordance with Wisconsin Motor Vehicle Code.

6. Load security:

   a. Supplies transported in motor vehicles shall be secured in such a manner that they will not be dislodged or fall out or forward during transit or sudden stops.

   b. Drawers in moveable trucks shall always be secured before the truck is driven.

c. All tower equipment (ladder trucks, aerial buckets, etc.) will be checked and secured prior to the movement of the vehicle.

d. Only materials and equipment necessary to carry on City work will be transported in or on City vehicles.

7. Never take drugs or strong medication before operating a vehicle. Remember that drugs, illness, or extreme fatigue may affect your ability to judge distances, speed, and driving conditions.

8. All persons who drive or ride in City vehicles will, in all cases, wear the installed seat belts.

9. Supervisors are responsible for insuring that all their employees are utilizing the installed seat belts.

10. Not more than three persons shall be permitted to ride in the front of a driver's seat of any vehicle. Persons shall not be transported in any vehicle unless safe and secure seating is provided for each such person.

11. Parking vehicles:

    a. Except when working conditions require otherwise, parked vehicles must have motor stopped, key removed from ignition and emergency brakes set, and be left in gear.

    b. If on a downgrade, turn front wheels towards the curb. If on an upgrade, turn away from the curb.

    c. When trucks or vehicles must be stopped on streets or highways, adequate warning signals must be used and also a flagman if traffic warrants.

    d. Turn signals will not be used as a parking warning.

    e. Before leaving the curb, look to see that no cars are approaching from either direction and signal your intention.

12. When backing up a vehicle, be sure the way is clear. Get out of the vehicle when necessary and inspect the area to be backed into. Back up slowly. Sound horn while backing when necessary. If there is another employee along, he should get out and direct the backing.

13. Never leave the vehicle unattended with the engine running and the emergency brake disengaged.

14. Drivers must be particularly alert while driving near children. Children must be kept from playing in or about City-owned vehicles. While working in areas such as

schools, parks, playgrounds, swimming pools, or community centers, drivers will be especially watchful for children and will drive carefully and slowly at all times.

15. Stay within posted speed limits. Slow down when conditions warrant.

16. Do not assume the right-of-way. The driver who has the last chance to avoid an accident may be the driver in the legal right. **"DON'T BE PUSHY; YIELD OR STOP. ALWAYS DRIVE DEFENSIVELY."**

17. Keep a distance behind other vehicles so as to avoid tailgating. Do not allow others to tailgate. Slow down, pull over to the side, let the tailgater pass.

18. Signal intentions at least 100 feet in advance, including change-in-lanes, and actual change-in-directions. Avoid sudden braking.

19. Turn on low beam headlights during dark periods of the day, such as during rain storms and fog. Headlights should be "on" 2 hour before sunset until 2 hour after sunrise when driving at night. Parking lights designate a vehicle is parked. Never drive with only parking lights on.

20. Filling tanks:

    a. Shut off the motor of the equipment.

    b. Do not smoke near gasoline pumps.

    c. Keep the hose nozzle against the edge of filler pipe.

    d. To avoid spilling gasoline, do not fill tank too fast or too full.

21. In the event of an accident involving City-owned vehicles, the following procedure will be followed:

    a. If personal injury occurs, call 911 and request an ambulance be dispatched to the scene.

    b. Notify the Police Department immediately and request an investigator at the scene. Do not leave the scene of the accident until the police report is complete, no matter how minor the accident.

    c. The driver of the City vehicle must report the accident to the supervisor as soon as possible.

    d. All claims against City insurance policies are to be forwarded to the Director of Administration.

CHAPTER 14 - FIRST AID

While emphasis is placed on the prevention of accidents and injuries, accidents do occur. Prompt, knowledgeable treatment of wounds or other physical results of accidents will, in many cases, prevent minor injuries from becoming major ones, and sometimes save lives.

The following first aid rules are established:

1. Each department foreman or supervisor shall receive American Red Cross first aid training and CPR training. All employees are encouraged to receive the same training.

2. First aid cabinets or kits shall be maintained in City of Fond du Lac buildings. First aid kits shall be carried on all street-driven equipment.

3. Employees are to check first aid supplies on a periodic basis. The supplies shall be those recommended by the City Paramedics. Minimum amounts of each item must be maintained. Supervisors should order supplies through the Purchasing Department.

4. Minor medical treatment for cuts, scratches, etc., can be given by the supervisor or a crew leader. Always be sure that open wounds are thoroughly cleansed with soap and water to prevent infection. Refer the employee to their family physician.

5. There may be cases in which an injured employee, while needing professional attention, could be transported to the hospital by City car. There may be cases, however, in which it is important that the injured employee be transferred by ambulance as a stretcher case with a qualified attendant available. But if there is any doubt in the mind of the supervisor or lead man in charge, it should be resolved by calling for ambulance service. As an example, the following conditions would definitely indicate ambulance service:

    a. Employee is unconscious or apparently in shock.

    b. Any apparent fracture.

    c. Any hemorrhaging.

    d. Severe abdominal cramps and/or vomiting.

    e. Other symptoms of internal injury.

6. To obtain an ambulance phone 911.

7. All animal bites, because of the possibility of rabies, should receive prompt medical attention by a physician.

8. All injuries, no matter how minor, are to be reported as soon as possible to the supervisor or foreman. Injury report forms shall be made available by the supervisors.

CITY OF FOND DU LAC
EMPLOYEE SAFETY HANDBOOK

MY SIGNATURE IN THE SPACE PROVIDED BELOW CONFIRMS MY RECEIPT OF THIS SAFETY HANDBOOK. I UNDERSTAND THAT FAILURE TO FOLLOW THE PROCEDURES IN THIS BOOKLET CAN LEAD TO DISCIPLINARY ACTION AND THE POLICIES AND PROCEDURES ARE SET FORTH TO MAKE THE WORKPLACE A SAFER ENVIRONMENT.

SIGNED_____

DATE _____

PLEASE DETACH AND RETURN THIS PAGE TO YOUR FOREMAN OR SUPERVISOR AFTER YOU HAVE READ IT.