City of Madeira Beach

SAFETY & ACCIDENT PREVENTION MANUAL

Adopted 6/11/2025

The City of Maderia Beach
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TABLE OF CONTENTS

INTRODUCTION

Safety is the responsibility of **every** employee. Only through the full support of every employee can our Safety Program be successful. You are expected to be concerned with your own safety, the safety of fellow workers and the safety of the general public. This means willing acceptance and active support of approved safety riles or safety procedures.

Accidents don't just happen. They are caused because someone did something he/she shouldn't have done; or because someone failed to do something he/she should have done; or because a hazard was not recognized. These are human failures and can be controlled. By exercising self-control, every employee has an opportunity to demonstrate teamwork. By demanding safe performance and enforcing approved safety procedures, supervisory personnel demonstrate concern for their employees' welfare.

This manual is issued to establish uniform safety procedures for tasks that are preformed in multiple activities throughout the City. Additional safety procedures may be required for specialized tasks that are not included in this manual. Your Department Director will prepare these procedures as supplemental procedure for your position as required.

RESPONSIBILITY FOR SAFETY

1. **Management and supervisory personnel** are responsible for ensuring the consistent enforcement of all safety procedures outlines in this manual, special rules issues by department heads, or of any other applicable safety instruction. This responsibility is discharged through the first line supervisory personnel who are generally designated “Supervisor”. Wherever the title “Supervisor” is used, it shall apply equally to all other personnel charged with first line supervisory responsibilities, regardless of the actual titles.

2. **Supervisors** are responsible for adequate safety instruction and job training of every employee under their supervision, including operation procedures, tools, and equipment, and individual protective equipment.

3. **Supervisors** are responsible for making sure that all tools and equipment used by employees under their direction are maintained in a safe operating condition.

4. **All Employees** are responsible for compliance with safety procedures, standards, and rules outlines in this manual or other applicable directives.

5. **All Employees** are responsible for assisting in every way possible to conduct adequate investigations of all accidents, and to preform realistic job safety analysis to identify and correct hazardous conditions for accident prevention.

SECTION I. GENERAL

Safety must be a part of the planning for every job, equal in importance to all other operational considerations. Observing the safety procedures contained in this manual will make operations safer, and will protect you, the employee, from potential accidents.

Unsafe conditions and unsafe procedures must be identified before they can be corrected. Every employee is responsible for immediately reporting those that are recognized. **All accidents or incidents must be reported, whether or not a personal injury or property damage is involved.** Remember that a "NEAR MISS" is a danger signal. The accident you prevent may be the one that could have injured you.

A. General Safety Procedures are Established for All City Personnel:

1. **Know your responsibilities.** Recognize hazards and communicate your suggestions for better and safer methods to your supervisor. Always be conscious of the safety of other as well as your own.

2. **Know your job.** Learn the right way by asking, not by trial and error. Always apply safe working practices.

3. **Report all accidents or incidents.** Whenever you or the equipment you operate is involved in an accident/incident, report it to your supervisor immediately.

4. **Obey all rules, signs, and instructions**. If in doubt, **ASK**

5. **Horseplay and practical jokes that could result in ANY injury are prohibited.** An act in jest can end in disaster. Any employee participating in such activities shall be subject to disciplinary action up to and possibly including discharge.

6. **Alcohol/Drugs.** Any Employee being in possession of or using alcohol/drugs while on duty, r reporting to work under the influence of alcohol/drugs shall be subject to disciplinary action in accordance with the City's Drug-Free Workplace Policy.

7. **Housekeeping.** Keep equipment, tools, materials, and work areas clean and orderly. Disorder causes injury and wastes time, energy and materials.

8. **Clothing.** Wear proper, accepted clothing for the job. Do not wear jewelry, loose clothing or neckties around rotating machinery.

9. Protective Clothing or Equipment. Special protective clothing and/or equipment shall be worn whenever specified by your supervisor or department policy, and shall be maintained in good condition.

10. **Machine Guards.** Never operate machinery and equipment with guards removed.

11. **Tools and Equipment.** Always inspect tools and equipment before use. Report defects to your supervisor immediately.

12. **Lifting.** When lifting bend your knees, grasp the load firmly, then raise the load, keeping your back as straight as possible. **GET HELP** for heavy loads.

13. All tools and equipment shall be used in accordance with manufacturer's guidelines.

MAINTAIN

A POSITIVE MENTAL ATTITUDE

ABOUT SAFETY

AND

IT WILL BECOME

A GOOD HABIT!

Prompt. Knowledgeable treatment of employee injuries will in many cases prevent minor injuries from becoming major ones, and may save lives. All employees are therefore responsible for immediately reporting to their supervisor all injuries that occur on the job.

Adequate first aid kits shall be maintained in appropriate facilities and in vehicles and equipment used by mobile work units. The kits shall be readily accessible, prominently displayed whenever possible, and their location made known to all potential users.

If medical attention is needed or requested, the employee should be given a Worker's Compensation form and sent for treatment to the medical facility designated to provide medical treatment to employees injured in your department.

The Worker's Comp form authorizes medical treatment therefore, the top portion of the form must be properly filled out to include date, division, specific job-related duties, and the signature of the referring supervisor, prior to the form being given to the injured employee. After treatment, this form is completed by the treating physician to show the medical status of the injured employee as follows:

1. Full Duty
2. Light Duty (with limitation as shown)
3. No Duty
4. Follow-Up Date (next visit)

The employee should immediately return the completed Worker's Compensation form to the authorized person in their department and a copy send to Human Resources.

No employee shall be allowed to return to work unless the Worker's Comp form has been returned showing either full duty or light duty. In those cases where an employee is returned to light duty, the department will determine if light duty within the stated restrictions is available.

If such light duty is available, the authorized supervisor or manager should indicate this on the margin of the Worker's Comp form and initial the form. If light duty within the stated restrictions is not available, the authorized supervisor or manager should indicate this on the margin of the Worker's Comp form and initial the form.

If any employee is working on light duty, and light duty becomes unavailable at any time during the period the employee has been medically restricted to light duty, the department must immediately notify the Human Resources office since benefits might be due, and notification of time off must be sent to the State.

The returned Worker's comp form and completed Report of an Injury to an Employee (white form) must be sent to the Human Resources Office within one (1) two working day of the injury (or the report of injury). This applies to all on-the-job injuries (including first-aid cases). If a department

delays sending the report of Injury and Worker's Comp form to the Human Resources Office, it may result in late payment of benefits to the employee and late reporting of the injury to the Stat, which would result in monetary penalties being assessed against the City.

If an employee is seriously injured call 911 for fire rescue (paramedics) and/or ambulance service, and be prepared to give the following:

1. Your name, and department/division.
2. Identify a City employee was injured.
3. Brief description of injury.
4. Exact location.
5. Telephone number from which you are calling.

The following are examples of **serious** injury:

1. Employee us unconscious or apparently in shock.
2. Any fracture of the lower extremities.
3. Any uncontrollable bleeding.
4. Severe abdominal cramp and/or vomity.
5. Other symptoms of internal injury.

Refer to the colored paper in the back of this manual for a list of approved medical providers for both non-serious (first-aid) and life threatening injuries. As this information changes, each employee will received new page(s) to update their respective manual.

Currently, prescriptions ordered by an authorized physician for a work-related injury can be obtained without payment at most area pharmacies. The pharmacy may verify coverage by calling the Human Resources Office at 391-9951.

If employees pay for a prescription for a work-related injury, they may submit for reimbursement through the Human Resource Office.

In addition to the above procedures related to employee injuries, the following safety procedures are established:

1. All injuries, including first-aid cases and insect stings shall be reported to the appropriate supervisor.

2. When limited to first-aid treatment in the job, open wounds shall be thoroughly cleaned with soap and water to prevent infection.

3. First-aid, rescue breathing and external heart compression shall be preformed only by trained personnel, and only to the extent reasonably necessary to preserve life and prevent permanent disablement until professional medical attention is available.

4. All animal bites, because of the possibility of rabies, shall receive medical attention and must be reported to the Pinellas County Sheriff's Office.

5. Supervisors are required to take immediate corrective action **to eliminate any** unsafe acts or unsafe conditions which could or would result in an accident.

SECTION III. FIRE PREVENTION

Fire is an ever-present hazard in public works and maintenance operations. In the variety of activities performed in these 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.

It is necessary that shops and fixed activities have a fire plan to combat fire if it should offur. The plan must include: Adequate warning measures for alerting all persons in the area of 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 maintain sage 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 which is certified and inspected on an annual basis.

A fire, to occur, must have three elements:

FUEL- a substance which will burn'

SOURCE OF IGNITION- heat or chemical reaction; and

OXYGEN- to sustain the fire or keep it burning. Remove any one of these three and fire will not occur.

It is far better to prevent fire from occurring at all. A semi-annual prevention inspection and training will be conducted by the Madeira Beach Fire Department to include proper storage and use of extinguishers.

1. Department/Divisions are responsible to ensure all fire extinguishers are in proper working order at all times and inspected and certified on an annual basis. Contact the Fire/Public Safety Department at 391-9951 for further information related to fire extinguishers.

2. Only approved solvents shall be used when cleaning machinery and equipment during maintenance and repair tasks. Use of gasoline to clean machinery and equipment is prohibited.

3. Cleaning solvents shall be slept in approved metal containers.

4. Gasoline used in small quantities in shop for fueling engines being repaired, tested, adjusted, etc. shall be handled and dispensed only in U.L. approved, explosive-proof safety cans.

5. Oily rags other flammable waste material shall be kept in covered, metal containers. Such debris shall be removed from shops and buildings as soon as possible and, in no case, shall be left unattended in a building overnight.

6. "**NO SMOKING"** shall be enforced in all areas where hazardous substances are stored or used.

7. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident.

The City provides a source of knowledge and assistance to departments and divisions on safety problems. For instance:

1. Information on chemicals- their hazardous properties and sage handling procedures.

2. Advice or active assistance in evaluation of potential fire hazards and planning to Schieve satisfactory fire prevention measures.

3. Trained personnel and specialized equipment for rescue work in the event of an accident are immediately available at all times.

4. And, remember to use the "911" emergency number. If you use another to reach the Fire Department, you only slow down the response to your emergency.

SECTION IV. HOUSEKEEPING

An effective safety program is not just a “push broom” effort, but an orderly arrangement of operations, tooling equipment, storage equipment and supplies.

Set a good example in your own area. Don’t hesitate to pick up unused odds and ends or litter from the floor and put them in the trash can. This encourages others to do the same.

A. **Base Operations.** Practices which will help you attain the maximum degree of orderly housekeeping:

1. Develop a routine procedure for inspecting your work area regularly each job.

2. Check closely on general working conditions. It is the first piece of trash on the window sill or under the bench or desk which invites people to add to it. Act immediately when necessary to keep heat, light, ventilation and sanitation satisfactory.

3. Report conditions which contribute to disorder, so they can be corrected.

4. Maintain work area in a clean and, so far as possible, dry condition. Where wet processes are used, drainage should be maintained, and dales floors, platforms, mats, or other dry standing places should be provided where practical.

5. Inspect every floor, working place, and passageway to be sure they are free of protruding nails, splinters, holes, or loose boards.

6. Keep aisles and passageways clear and in good repair, with no obstruction across or into aisles which could create a hazard.

7. Clearly mark permanent aisles and passageways. Do not allow exits to become blocked.

8. Do not allow fire protection equipment to become blocked or inoperative.

9. Keep all electrical control boxes (disconnects, circuit breakers, and distribution cabinets) free of stored items. Be sure control boxes are properly identified as to their functions.

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

11. Lay out extension cords, air hoses, water hoses, ladders, pipes, tools, etc. in such a way as to minimize tripping hazards or obstruction to traffic.

12. Make sure there are adequate seats or benches where needed. Do not use makeshift seating (such as kegs or boxes).

13. Check equipment which uses coolants to make sure oil, coolant, or water does not leak onto the floor. See that absorbents are handy for soaking up spilled liquids.

14. Provide adequate toe boards to prevent objects from rolling over the edge when material is stored overhead.

15. Secure materials stored on racks or hooks from failing and route walkways a safe distance from the surface beneath.

16. Establish and post load limits on loft or mezzanine storage areas.

17. Make sure you have trash containers in strategic locations. They should be plainly marked and emptied when full.

18. Do not store anything on the window ledges.

19. Eliminate the practice of keeping excess material at work places. This is one of the most prevalent poor work habits.

20. Be sure flammable solvents are kept in approved containers and are used only when needed. Do not store more than one day's supply in the work area at any time.

B. Vehicles and Other Equipment. Good housekeeping practices refer not only to fixed base operations, but also to vehicles, tool boxes, tool tailers, and all equipment.

1. When transported in the operator compartment, tools and materials must be secured.

2. Form and scrap lumber with protruding nails and all other debris, should be kept clear from all work areas.

3. Combustible scrap and debris should be removed at regular intervals.

4. Containers should be provided for collection of flammable or harmful substances.
5. Wast should be disposed of at frequent intervals.

6. Tools and other equipment should be stored properly when not in use. Do not leave them unsecured in vehicles or trailers.

7. A procedure for control of tools, such as a check-out system from trailers, should be used.

Remember:

SPECIAL EFFORT IS NEEDED

TO PROMOTE

GOOD HOUSEKEEPING CONDITIONS!

Make these COMMONSENSE RULES part of your job:

1. Identify hazards before you start a job.
2. Don't take chances- respect all precautions.
3. When in doubt, ask your supervisor.
4. Know in advance what could go wrong and what to do about it.
5. Know how and where to get help.
6. Learn basic first aid measures.
7. Use the corrective protective clothing and equipment before handling hazardous substances.

SECTION V. RIGHT-TO-KNOW

The Occupational Safety and Health Administration (OSHA) has used a rule, The Hazard Communication Standard, aimed at keeping you safe and healthy. It says you have a "Right-to-Know" what hazards you face on the job, and how to protect yourself against them.

The city works to protect you against dangers of hazardous chemicals Safety training and proper storage of chemicals are just a few of the things being done to keep you safe. "Right-to-Know" training is provided for all employees when first hired, and once a year thereafter.

The City has adopted a written hazard communication program which does the following:

1. Tells you about the Hazard Communication Standard.

2. Explain how it's being put into effect in your work place.

3. Provides information and training on hazardous chemicals in your work places, this includes how to:

    a. Recognize, understand and use labels and Materials Safety Data Sheets (MSDS)

    b. Use safe procedures when working with hazardous substances.

As an employee you also have the responsibility to protect yourself. You must read and follow the instructions and warnings on labels and Material Safety Data Sheets (MSDS).

How do you know if something is hazardous?

- ✓ **First,** look on the container of the substance. There are many types of labels, but if a chemical is hazardous, the label should tell you. Play it safe. Get into the habit or reading the labels on all containers – and following all instructions. If you have any questions, ask your supervisor or refer to the Material Safety Data Sheet (MSDS). The MSDS gives you the information you need to work safely with chemicals.

- ✓ **Read** the MSDS before you start a job, then way you'll **BE PREPARED!!**

The rest is up to you. The city has gone to a lot of effort to protect you, but the only person who can keep you safe every day on the job is **you.**

SECTION VI. DRUG ALCOHOL ABUSE

The consequences of alcoholism and rug abuse to business and industry are realized as hidden costs such as lowered productivity, increased absenteeism, inefficiency, increased employee turnover, increased injury rates and incidents arising from behavioral problems.

The City believes employees with alcohol and/or drug problems require professional assistance. The Employee Assistance Program (EAP) is a professional, confidential and personal counseling service program which is available to assist employees, or eligible family members in resolving personal and job-related problems which are having an undesirable impact on their lives and/or job.

Free diagnostic counseling sessions are available to assess personal problems. The City has arranged to provide this benefit with a company whose services are retained by contract. If further assistance is desired, after the first session it may become necessary for the individual to pay for the additional expenses. Further information regarding this program is available from the Human Resources Department at 391-9951.

It is a dismissal offense (Group III First Violation) to consume alcohol while on duty, including breaks and/or while on lunch periods, as is the possession or use of illegal controlled substances while on duty, including breaks and/or while on lunch periods.

SECTION VII. OFFICE SAFETY

You spend more time in the office that anywhere else -- except in your home, where most of the time you're asleep! While most people assume offices are safe, there are safety hazards.

Trip and falls can be very painful. To avoid them:

1. Keep desk and file drawers closed when not in use. You can trip over opened bottom drawers and hit your head on opened top drawers. Also, never open more than one file drawer at a time, especially the top ones in a stack. The entire unit, becoming top-heavy, could tip over.

2. Make sure computers, typewriters and other machines are securely placed so they cannot fall and hurt you or your co-workers.

3. Stand on step ladder or step stool- not on a desk or chair- when you much reach things in high places. Do NOT use the top step of a ladder.

4. Sit properly in chairs. To avoid falls, don't sit on the edge of your seat. Be sure to keep your chair flat on the floor never tilt the chair back.

5. Use aisles, don't take short cut.

6. Watch where you walk. Make sure you can see over a load you are carrying. Don't read while walking.

7. Use handrails on stairways.

Cuts and pinches hurt, too. To prevent them:

1. Use the handle when closing a desk or file drawer. Otherwise, you may pinch or cut your fingers.

2. Sweep up broken glass immediately. Wrap the glass in strong paper, label the package and dispose in a safe place.

3. Store sharp items separately. Don't leave knives, cutting blades, thumbtacks, etc. lying around.

4. Keep electric and phone cords neat. Make sure they are located out of the flow of traffic.

5. Use office equipment carefully. Disconnect the power before you clean or adjust a power-driven office machine. Electric fans should be guarded so the spinning blades do not injure

you. Never handle a fan which is in operation first, turn it off and wait until it comes to a complete stop.

6. Report poorly lighted work areas or burned out light bulbs.

How can you avoid accidents in your office? Here are some general helpful hints.

Your office can be a safe place to work if you:

1. Lift carefully. When you lift objects, keep your back straight and let your leg muscles do the work. And when a load is heavy, get help. It's better to wait for help than to strain your back while trying to do the job alone.

2. Prevent fire. Smoke only in designated areas. Use ash trays and discard smoking materials into receptacles provided, not into waste baskets.

3. Know where the fire extinguishers are located and how to use them.

4. Know fire exit locations and learn the emergency procedures of your office.

5. Wear proper clothing. Avoid loose jewelry or ties and wear practical shores. Tie back long hair when near a machine.

6. Take care of injuries promptly. Remember, even the slightest paper cut needs attention; otherwise it could become infected.

7. Keep blades of paper cutters closed when not in use and always use caution when operating a paper cutter.

SECTION VIII. LIFTING, PUSHING & PULLING

Analysis of past experiences has shown almost one-third of the injuries experienced by employees are related to materials-handling tasks. The tasks involve actions or body motions such as:

Lifting; Pushing; Pulling; Twisting; Carrying; or Lowering.

The objectives of activities involve a variety of results such as:

1. Moving articles from one place to another.
2. Raising and lower articles.
3. Changing positions of an article or portable machine.
4. Adjusting valves, nuts, covers, etc.

Problems are caused by such conditions as: Weight, Size, Shape, Surface of Materials, Working Surface, Sudden Release of Resistance, Position or Location.

Most of the materials-handling accidents can be avoided by taking a little time to plan ahead; using mechanical equipment whenever possible; thinking about the proper way to do the tasks; and using the proper tools.

The following safety procedures are established for all employees:

1. Inspect materials for silvers, jagged edges, burrs, rough or slippery surfaces.

2. Wipe off greasy, wet slippery, or dirty objects before trying to handle them.

3. Keep hands free of oil and grease.

4. When adjusting or changing a grip, set the object down.

5. Never carry glass under an arm because a fall might sever an artery.

6. Never carry a load you can't see over the ground.

7. Carry long objects such as pipe or lumber, on the shoulder with the front as high as possible to avoid striking other employees- especially at corners.

8. Wear appropriate individual protective equipment when handling materials which present health hazards such as acids, corrosive liquids or powders, etc.

9. When opening bales or boxes bound with wire or steel bands, wear heavy gloves and eye protection. Take special care to prevent ends of binding from flying loose and striking the face or body.

10. When moving materials on hand trucks or dollies, push rather than pull whenever possible.

11. When exerting leveraging on large wrenches or prying tools, pull rather than push whenever possible.

12. Check the intended route for adequate clearance and for slipping or tripping hazards.

13. Assume a well-balanced stance, use leg muscles, bend your knees and keep the back as straight as possible while lifting.

14. Avoid twisting the body trunk while carrying materials; move your feet to change direction.

15. Test the weight of the object first and get help if it is too heavy to handle alone.

16. Get help if the size, bulk, or shape of the article prevents you from maintaining balance and/or puts excessive strain on back or abdominal muscles.

17. When several persons are handling heavy materials, all should face forward whenever possible. If a person must walk backwards, others should be especially alert to slipping, tripping, or bumping hazards and issues appropriate verbal directions if needed.

18. Avoid getting hands or other body parts pinched between the load and other objects around or near it.

19. Use the proper tools such as special wrenches, hooks, pry-bars, or special handling tools to lift heavy covers, operate heavy valves, etc.

20. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident.

SECTION IX. MOTOR VEHICLES AND MOBILE EQUIPMENT

Many employees operate cars, trucks and other mobile equipment in the course of their work. Driving places heavy demands upon an employee's alertness, judgement and skill. Driving errors an employee may make can be costly to the City, but even greater importance is the potential which exists for serious injuries to the employee and members of the general public.

City vehicles are easily identified as such an constitute a traveling advertisement seen by many citizens. They have what advertising agencies call "high exposure". This exposures exerts an important influence on public relations for the City, since safe, courteous driving habits build a positive public image. In addition, the application of the principles of defensive driving helps avoid accidents.

A. Establish Safety Procedures:

1. An employee will immediately notify the Sheriff's Department (911) and his/her supervisor anytime a City vehicle is involved in a motor vehicle accident. The Sheriff's Department will in turn notify the Human Resources Department of the accident. If the accident occurs outside the jurisdiction of the Sheriff's Department, the Department will notify Human Resources.

2. The Department of the employee involved in a motor vehicles accident will insure a City Motor Vehicle Accident Report is forwarded to their Safety Coordinator, who will insure it is sent to the Human Resources Department within one (1) working day after the date of the accident.

3. Any City employees involved in a motor vehicle accident with a company vehicle and found at-fault or cited by the investigating officer will be required to attend a Safe Driver Course conducted by the State.

4. No vehicle or mobile equipment shall be operated if it is in defective or unsafe condition.

5. Any employee operating company vehicles or mobile equipment must have a valid Florida license in his/her possession in the appropriate class as required by his/her position.

6. All persons driving or using company vehicles or mobile equipment shall wear seat belts as required by State law.

7. Every slow moving vehicle or equipment, or other machinery **designed for use at speeds less than 25 miles per hour,** will be equipped with a slow-moving vehicle

emblem. This includes all road construction and maintenance machinery. Vehicles or equipment displaying this emblem will not be driven in excess of 25 miles per hour.

8. Flashing or rotating amber lights will be authorized on road/street maintenance equipment, road/street maintenance vehicles and road service vehicles when in operation or to designate a hazard.

9. The driver company vehicles will conduct a **"Safety Circle Check"** anytime before it is entered or moved. The following procedure will be followed:

B. General Requirements

1. Drivers will visually inspect the perimeter of his/her vehicles prior to putting the vehicle in motion in any direction. The shall be accomplished by the driver walking around his/her vehicle to ensure the area to the rear, sides, and front are clear of all hazards before starting the vehicle.

2. Drivers shall also give an audio warning by horn or backup alarm and check all mirrors before any backward movement is made.

3. Drivers shall back cautiously and be always on the alert for any unexpected event.

C. Additional Requirements. In addition to requirements A, B, and C above, the driver of vans, trucks, and construction equipment will use safety cones. The following procedures apply to all drivers:

1. Safety cones will meet DOT requirements and will be used to remind the driver to "Safety Circle Check" the vehicle each time it is going to be entered and moved. Tying a rope, wire or anything else to the cone and vehicle is prohibited.

2. Safety cones will be sued at all times when parking outside of a fenced-in vehicle storage yard.

3. Placement of cones:

   i. **Parallel Parking-** the safety cone will be placed adjacent to the rear bumper
   ii. Nose-in Parking- When the nose of the vehicle is pulled in place, the safety cone is placed to the rear of the vehicle and centered.

   iii. Back-in Parking- When the vehicle is backed in place, the safety cone is placed in front of the vehicle and centered.

The above procedures in no way change the procedures on placement of the safety cones used to direct traffic around work locations where construction or other work is in progress.

All trucks, when backing, will also utilize a ground man when available. The ground man will stand to the left rear of the vehicle and be within sight of the driver **at all time.** The ground man will direct the driver back, ensuring the rear and sides are clear and the movement can be made safely. If no assistance can be obtained or is unavailable, the driver will conduct a "Safety Circle Check" as outlined in the General Requirement.

D. VEHICLE INSPECTION. Motor vehicles must be inspected daily while in use and maintained in mechanically safe condition as follows:

1. Signs of Damage- Look under the vehicle for fluid leaks, loose parts or other signs of damage.

2. Fluid Levels- Check oil, engine coolant, power steering fluid and other fluids. For vehicles equipped with hydraulic systems, check these levels daily as well.

3. Look over the exterior of vehicle for damage.

4. Windshield, Mirrors, and other Glass- Check for cleanliness and defects.

5. Tires and Lug Bolts- Check tread wear, air pressure and lug bolt tightness.

6. Trailer connections.

7. Chains, Binders and other Tie-Downs.

8. Fire Extinguisher- Check to see the charge registers "Full".

9. First Aid Kit.

10. Brakes.

    i. To Check Brakes- Press the brake pedal with light, gradual pressure. If the pedal travels or fades to the floor, then the brakes are not adjusted or the master cylinder is not functioning properly.

ii. Apply pressure on the brake pedal three times to build fluid pressure in the system. On the third stroke, apply excessive force and hold for force seconds. If the pedal gradually glides to the floor, do **not** drive the vehicle and report the condition. Report any vehicle problem to your Supervisor who will decide how the repairs will be made.

iii. Trailer Brakes- Check at low speed before leaving the parking areas or yard.

11. Steering Gear- Check at low speed before leaving the parking area or yard.

12. Lights- Check both low and high beams, brake lights, parking lights, and signals lights.

13. Check Windshield Wipers, Washers and Defroster.

14. Test Horn.

15. Check Mirrors for Proper Adjustment.

DO NOT attempt to drive a vehicle which is in an unsafe condition. Report any vehicle problem to your Supervisor who will decide how the repairs will be made.

SECTION X. PROTECTIVE CLOTHING & EQUIPMENT

The variety of work operations performed by employees involved many hazards. Much research has been done to develop measures to protect employees from accident injury. When the hazards cannot be engineered out of the machine or process, then protective clothing or equipment has been designed to prevent injury.

An employee who fails to wear protective clothing and use safety equipment becomes a gambler who is betting his/her life, or eyesight, or other physical well-being that "it won't happen to me". Losing the bet becomes more uncomfortable for a lifetime than wearing the equipment for the duration of the job. Safety in this instance is a knowledge of the hazards, knowledge of the protection available, and a frame of mind which makes use of available protection a safe work habit.

A. **HEAD PROTECTION.** The many construction and maintenance activities preformed by employees involve working above or below ground levels, movement operations the hazards of being struck by falling objects, machinery, and loads being moved by machinery constantly exist. Hard hats are provided to protect the head against the danger of head injuries from falling or flying objects. The proper protection is provided by the suspension which gives the helmet its impact-distribution abilities. It is important for it to be adjusted to fit the wearer and keep the hat itself a minimum distance of 1¼ inches above the wearer's head.

   Head Protection Safety Procedures:

   1. The City will be responsible to supply the proper head protection when required in the performance of the employee's duties to maintain proper safety standards.

   2. The construction and shape of hard hats shall not be altered in any manner.

   3. Hard hats shall not be painted or have holes drilled into them because it alters the properties and strength of the hat.

   4. Hard hats will be worn in any area designated "HARD HAT AREA"/

   5. All personnel engaged in climbing tasks or working from aerial lifts shall wear head protection which meets the approved standards for dielectric properties (Class B Hard Hat) due to the possibility of contacting overhead electrical hazards.

   6. Hard hats of the type approved by the City shall be work when working in areas where objects are subject to falling, flying or striking the head, e.g. construction projects, material hoisting, inspector inspecting condemned or unsafe houses, trenching or excavation, etc.

7. Long hair should be secured when working with or around machinery.

B. FACE AND EYE PROTECTION. Hazards involving the possibility of injuries to the face and eyes in both indoor and outdoor tasks. They range from dust blown into eyes oin a windy day to particles of steel, sand, concrete, etc. propelled into the eyes with considerable force by power tools and machinery or splashed of corrosive dust and liquid chemicals.

There are many types of safety glasses, goggles, shield, etc. to protect workers from these hazards. Although the loss of one or both eyes can have extremely serious consequences to an employee, individuals often vigorously resist efforts of management to require this vital protection. This is probably one of the most important protective features of any safety program.

Face and eye protection shall be provided for any task where there is a reasonable probability of injury which can be prevented by such protection. Employees assigned to preform tasks which require eye protection shall wear the protector provided.

The City shall make appropriate face and eye protection devices available to the employee and make their use mandatory for specific tasks. Employees authorized by their department director to wear industrial safety lenses for the performance of their duties can be partially reimbursed. Employees should refer to the City's rules and regulations for the proper reimbursement procedures.

Safety glasses, goggles and other eye protective equipment offer a vital protection. If sufficient care is not exercised to maintain them properly, dirt or scratched lenses may provide another hazard from reduced visibility.

1. Face and/or eye protection shall be worn anytime there is a possibility of injury, for example:

    a. Using air lance, grinding, cutting, milling or drilling with power tools.

    b. Using impact wrenches and compressed air tools.

    c. Chipping, scraping, scaling paint, rust or other materials.

    d. Using punches, chisels or other impact tools.

    e. Cutting rivets.

f. Cutting or breaking glass.

g. Cutting or breaking concrete.

h. When using powder actuated tools.

i. Cleaning dust or dirt from under vehicles, machinery, etc.

j. Using metal cutting lathes, sharpers, drill, power hacksaws and other metal working tools.

k. When using corrosive or reactive liquid and/or solid chemicals.

l. Using power woodworking machinery, both fixed and portable.

m. Operating or in the vicinity of machinery where there is a danger of flying objects or dust to the face or eyes.

n. When working on any overhead surface or object which requires the employee to face upward.

2. A full plastic face shield shall be worn when operating air lance, edgers, chippers and chain saws.
3. A face shield with proper filter lens, or welder's lens or welder's goggles, shall be worn in all welding and cutting operations:

   a. Welder's 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 or goggles with the proper filter lenses.

C. HEARING PROTECTION. During your work assignment, there may be some machines or equipment which may produce sound levels in the frequencies which could cause hearing loss. Hearing protection is to be work in compliance with OSHA guidelines.

D. The following table is taken from existing standards showing the maximum permissible noise exposure in an 8-hour shift:

Permissible Noise Exposure	
Duration of Day, Hours	Sound Level dBa
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼	115

When employees are subjected to sound levels exceeding those listed in the table, attempts should be made to use engineering controls. If the sound level cannot be reduced within the levels set forth in the table, then personal protective equipment shall be provide 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 the employees shall be provided whenever possible, so long as it achieves sufficient reduction of noise exposure.

Ear protection will be used when the hours of exposure to excessive noise exceeds the permissible levels for one day. (Example: concrete, chain saws, generators, portable compressed air tools etc.).

E. HAND PROTECTION. Hands and fingers are exposed to many hazards which can cause cuts, scratches, bruises and burns. Fingers are hard to protect because they are constantly exposed to the actual work surface. You can however, shied them from many common injuries by using proper protective equipment- **GLOVES.** There are various types of gloves, each with different protective qualities. The proper glove should be selected for each job.

The following safety procedures are established:

1. Gloves shall be worn when handling any objects that may cause injury, such as:
    a. Handling heavy, sharp, jagged or rough materials and objects.

    b. Handling corrosive, toxic and/or possible carcinogenic chemicals which may be absorbed through the skin.

    c. Working with brush, trash, or other debris which could cause injury to the hands.

    d. Welding.

e. Handling any other hazardous or poisonous materials.

F. FOOT PROTECTION. Many tasks involve manual lifting or handling of heavy tools and materials. Food injuries frequently occur when heavy objects are dropped, resulting in bruises, dislocations, fractures or crushes. Shoes reinforced with steel toes or soles will prevent foot injuries from impact of falling objects, stepping on sharp objects, or exposure to blades of power tools.

The wearing of sandals or canvas shoes is prohibited. A leather-type shoe shall be worn. Exception can be made by department directors for those employees whose duties would require them to wear shoes for sports activities, etc. while preforming their duties.

If the job description indicates the need for safety shoes, the city will provide the appropriate footwear. Steel-toe shoes or boots purchased by employees must meet the requirements of ANSI Standards.

G. RESPIRATORY PROTECTION. There are many tasks in employment involving exposure to fumes, gases, mists, chemical dusts, etc. which are harmful to the human respiratory system, or exposure to environments containing insufficient oxygen to support human life.

The hazards can be avoided by use of appropriate filter action breathing masks, self-contained breathing apparatus, etc. Safe performance is achieved through adequate knowledge of the noxious or toxic effect of substances being handles, the circumstances under which harmful atmospheres may exist in the work environment, adequate testing to determine the nature of the environment before entering it, the type of equipment which will provide adequate protection, and training in the proper way to use the protective equipment.

Respiratory Protection Safety Procedures:

1. Supervisors shall become familiar with the atmospheric properties of all work site environments, particularly those involving any exposure to noxious/toxic substances or any oxygen deficiency. It is the responsibility of the supervisor to recognize potential hazards, the circumstances which these hazards may exist, the proper method of testing for hazardous atmosphere, and how to use the proper protective breathing apparatus. It is further the responsibility of the supervisor to thoroughly instruct his/her employees in the recognition of these hazards.

2. Suitable breathing apparatus shall be conspicuously placed near the work environments or carried with the employee where there is the possibility of exposure to harmful atmospheres. The apparatus shall be kept sterile and used only for the protective function intended.

3. Each time the respiratory equipment is used, a report will be made to the supervisor of the reason for its use and the amount of time it was in use. This will aid in the replacement of filters or other equipment.

4. Approved respirators shall be worm in the following instances:

    a. When welding on brass, bronze, or galvanized iron in confined areas where ventilation is limited.

    b. When entering manholes, sewers, vaults, or other confined spaces, where tests indicate presence of noxious atmosphere after attempts to purge and ventilate them have been unsuccessful.

    c. When handling pesticides or other chemicals which can be harmful to the human respiratory system.

    d. When determined by the supervisor to be advisable due to the known or suspected presence of hazardous substances or lack of oxygen in the environment concerned.

SECTION XI. LADDER SAFETY

The major hazard in using ladders is a sudden fall, while other hazards include splinters, slivers, and slops. Major causes of falls are excessive load carrying, climbing or descending too fast, jumping and reaching out too far while working from a ladder. /The use of metal ladders has introduced another potentially dangerous hazard since they become an electrical conductor when they come into contact with an energized electrical service.

Ladder Safety Procedures:

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

2. Metal bearings of lock, wheels, pulleys, etc. shall be frequently lubricated.

3. Frayed or worn rope shall be replaced.

4. Safety feet and other auxiliary equipment shall be kept in good condition to insure proper performance.

5. Ladders shall be stored in such manner as to provide ease of access or inspection and to prevent the danger of an accident when withdrawing a ladder for use.

6. Ladder carried on vehicles shall be adequately supported to avoid sagging and securely fastened in position. This will reduce damage due to rad shock.

7. Ladders shall not be painted because painting may hide defects. Wood ladders should be sanded to remove splinters.

8. Ladders shall be inspected frequently and those which have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as “Dangerous, Do Not Use”.

9. Straight ladders should form a triangle when placed against a wall or object for climbing. When properly placed, the bottom side of the triangle should be about one-forth as long as the vertical side (i.e., if the ladder is leaned against a wall 8ft high, the feet of the ladder should set 2 feet out from the wall). When standing on the bottom rung, arms should be level and extended and back straight for proper climbing angle.

10. A Straight ladder should be long enough to extend at least three rungs above the level to which the user is climbing.

11. A ladder shall not be used as horizontal plank, platform, or scaffold, except those designed for emergency use, as in the Fire Department. The increased strain placed upon it will weaken it or beat it outright.

12. If the bottom of a ladder must be placed on an insecure surface, it shall be tied at the top, or an assistant must hold it.

13. Employee shall not stand on the top of a stepladder to work.

14. Ladders shall not be placed in front of doors opening toward the ladder unless the door is blocked open, locked, or guarded.

15. Ladders shall not be placed on boxes, barrels, or other unstable bases to obtain additional height.

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

17. To support the top of a ladder at a window opening, a board should be lashed across the back of the ladder, extending across the window and providing firm support against the building walls or window frame.

18. Short ladders shall not be spliced together to form temporary extensions.

19. Muddy or slippery shoes shall be cleaned before climbing.

20. Rungs and steps shall be kept clean and free of grease and oil.

21. Articles should not be carried by hand while climbing. A hand line should be used to raise or lower tools and materials.

22. All ladders are electrical conductors and caution shall be used in the vicinity of electrical equipment.

23. Areas where portable ladders are used shall be kept clear of rubbish and waste materials. Unused materials shall be safely stored.

24. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident.

25. Ladders must have all the labeling provided by the manufacturer in place.

SECTION XII. LADDER SAFETY

Accidents are often caused by an employee's failure to use the proper tool for a job, or by the use of a tool which is defective in some manner. Proper use and proper maintenance of tools contributes to safer, more efficient performance.

Hand Tool Safety Procedures:

1. Employees must be made aware of the proper tool for every job.

2. Cutting edges shall be kept sharp, and carried in a suitable sheath or holster.

3. Defective tools shall be promptly reported to the supervisor for repair or replacement.

4. Handles shall be kept free from splinters, burrs, etc. Make sure handles are tight on the head and not weakened by cracks or splits.

5. Impact tools such as hammers, chisels, punches or steel stakes which have burred heads shall not be used. The head should be dresses to remove burrs and shipped edges.

6. Only tools designed with the proper tensile strength shall be used for prying and leverage function.

7. When handing a tool to another person, sharp points and cutting edges shall be pointed away from both the person grasping it and the person offering it.

8. All tools shall be placed in there proper container when not in use.

9. When working above ground level, or above an excavation, tools, equipment and debris shall be secured whenever possible to prevent them from falling on personnel below. Place barricades or warning devices to route pedestrian traffic around any potential drop zone.

10. Only properly insulated tools shall be used when working around energized electrical circuits or equipment.

11. All employees shall avoid using metal measuring tape, fabric tapes containing woven metal strands, rope with wire core, or other tools and equipment containing metal around energized electrical circuits or equipment.

12. Appropriate personal protective equipment shall be used when using tools which create hazards from flying particles, bodily contact with sharp cutting edges, etc.

13. Suitable handles shall be used on all files or tools with pointed tangs.

14. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident.

SECTION XIII. PORTABLE POWER TOOLS

There are several hazards commonly associated with the use of hand-operated power tools. These hazards can be greatly reduced by using the tools properly, keeping guards in place, and by wearing the appropriate protective equipment. When operated properly, these tools save time and physical labor. When operated improperly, they can inflict severe injuries.

The source of power can be electrical, gasoline engine, compressed air, or powder-charged. There are hazards peculiar to each source and hazards which are common to all of them.

A. All Power Tools. All power tools shall be used in accordance with manufacturer's instructions. Most of these tools have a cutting, drilling, or impact function. They are quite powerful and can inflict severe damage to soft body tissue. Most of them do not stop immediately when the power source is cut off- they coast until the momentum dies. Most of them are actuated by a so-called "deadman" switch. That is, the actuating switch is part of the grip and when the grip is released, the switch disconnects. This is a very important safety feature which should **always** be maintained.

Power Tools Safety Procedures:

1. The actuating switch should never be locked in the "ON" position.

2. Employees will observe and follow departmental lock-out/tag-out procedures to prevent the unexpected energization, start up, or release of stored energy while working on or around equipment.

3. A ground fault receptacle should always be used when operating power tools in the presence of water or moisture. Vehicles should carry portable ground fault receptacles for use with all portable hand tools at wet areas or for use at construction sites.

4. Hands, feet, and other parts of the body shall be kept out of the line of operation.

5. A well-balanced stance on firm footing should be assumed when using power tools.

6. An employee should use only the power tools which he/she has been authorized and trained to use safely.

7. Power tools shall not be operated without the guards which have been provided.

8. Suitable personal protective clothing and equipment shall be worn when operating power tools for protection of the head, eyes, hands, body, trunk, feet, etc.

9. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in accident.

B. Portable and Fixed Electric Tools. The chief hazards involved in use of electrically powered tools are:

1. Electric shock from a short circuit.
2. Cuts, lacerations, etc. from cutting edges.
3. Burns from buts or blades heated by friction.
4. Being struck by chips, shavings and other debris during operation.

Portable/Fixed Electric Tool Safety Procedures:

1. All portable/fixed electrical tools used shall be grounded by connecting a three-wire cord with polarized, three-prong plug, to a properly grounded, three-hole receptacle. The only exception to this will be the use of double-insulated electric tools which are impressed or embossed "double-insulation" and are approved, tested and listed by Underwriters Laboratories, Inc.

2. Extension cords used with portable electric tools must be of the three-conductor type with matching plug and receptacle. Two-wired cord may be used with double insulated tools.

3. Cords from the tool itself and extension cords shall be protected from contamination by oil or acid solutions.

4. Cords shall be protected from damage to wire conductors or terminal connections caused by excessive tension (pulling), kinks, pinching, etc.

5. Electrical hand tools shall be visually inspected each time they are used for damaged 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 as well as proper insulation at these points.

6. Defective portable electric equipment shall be repaired only by qualified maintenance personnel.

7. Adjusting keys or wrenches shall be removed before starting.

8. If it is necessary to use electric equipment in a wet locating, only low voltage equipment shall be used and rubber boots and rubber gloves must be worn.

9. Equipment shall not be overloaded.

10. Tools shall not be operated without the guards which have been provided.

11. Suitable personal protective clothing and equipment shall be worn when using portable/fixed electric tools.

12. Power must be shut off, the machine stopped, and the electric plug disconnected before any adjustments are made or any effort is made to clear jammed objects.

13. Portable electric tools shall not be left unattended with the power cord plugged in.

14. Portable electric tools shall not be carried fro any extended distance while plugged in, particularly with a finger on the switch.

15. The flange which abuts circular blades, grinding wheels or abrasive cutting wheels shall be frequently inspected for damage. Nicks or chips which cause the blade or wheel to be mounted off-center cause vibration and possible disintegration of abrasive cutting wheels.

16. The maximum distance between the griding wheel and the tongue, at the top guard opening, will at no time exceed 1/4 inch.

17. The work rest for a grinding wheel shall be securely fixed in position as close as possible to the wheel, and in no case more than 1/8 inch from the wheel.

18. Each new grinding wheel shall be visually inspected before installation to ensure the rated speed of the wheel is not exceeded. The allowable speed in rpm will be indicated on the wheel.

C. GASOLINE ENGINE-POWERED TOOLS. The chiefs hazard involved in using gasoline-powered portable tools are:

1. Fire from flammable fuels.
2. Cuts, lacerations, etc. from cutting edges.
3. Burns from hot engines.
4. Being struck by chips, shavings, flying objects, and other debris.

Gasoline Engine-Powered Tools Safety Procedures:

1. The clutch shall be disengaged before starting. Never start under a load.

2. Employees shall always shut off the engine, wait for the machine to stop, and disconnect the spark plug wire before making adjustments or clearing jammed objects.

3. The machine should never be operated without the guards provided for it.

4. Suitable personal protective clothing and equipment shall be worn when operating the machine (see Section X).

5. Pruning equipment shall not be left unaltered.

6. Running or hot engines shall not be refueled.

7. Smoking while refueling is prohibited.

G. PORTABLE COMPRESSED-AIR TOOLS. One of the chief hazards of using air hammers for chipping and drilling is noise exposure. All persons on a crew working in close proximity to an air hammer or compressor are exposed to sound levels well above the maximum allowable limit for an 8-hour shift. These noise exposures have been identified as sound frequencies and levels of intensity which can cause some permanent hearing loss. It is essential, therefore that hearing protection such as ear muffs worn (Section X).

Other hazards involving use of tools operated by compressed air are:

1. Strains from improper lifting and operation (tools are usual heavy).

2. Cuts, lacerations, etc. from cutting edge.

3. Being struck by chips, shavings and other debris propelled by the tool during operation, or propelled by leaking air under considerable pressure.

4. Being struck by whipping air lines which break or disconnect under pressure.

The following safety rules are established:

1. Much of this equipment is heavy. To avoid strain, employees shall lift properly and assume a well-balanced stance on firm footing when operating it.

2. Air hoses shall be securely coupled before charging with air pressure.

3. Hoses and couples shall be inspected for damage contributing to air leaks before using.

4. The pressure relief valve shall be inspected every time the compressor unit is placed in use. Have the unit checked by qualified maintenance personnel if the pressure relief valve appears to be defective.

5. The pressure regulator shall be inspected frequently during operation. If the air pressure exceeds the maximum pressure stated for normal operation, the unit should be turned in for repair.

6. The air should be turned off and the air pressure released before disconnecting. Air pressure should not be released if personnel are standing in front of, or over the outlet.

7. Air valves should be opened gradually.

8. If an air hose breaks, pressure should be turned off before an attempt is made to repair it.

9. It order to prevent an air hose from whipping about if it breaks or uncouples, the hose should be attached to the tool housing with a chain.

10. Compresses air should not be used for cleaning or clearing away debris, and compressed air streams should not be directed at another person for any reason.

E. POWER-ACTUATED TOOLS. Most of these tools have a ram function to driver into compact substances with tremendous force. The hazards involved are:

1. Explosion of improperly stored charges.
2. Accidental discharge.
3. Force of the ram deflected due to improper setting the tool.
4. Flying particles propelled by shock when the charge is set off.

Bystandards and other workers must be kept a safe distance e from the point of operation when setting the charge and exploding it.

Power-actuated Tools Safety Procedures:

1. This equipment shall be operated only by personnel **authorized** and **properly trained** to operate it safely.

2. Power charges shall be kept secure from unauthorized handling and stored in accordance with the manufacturer's recommendation.

3. Exposure of power charges to heat, chemical, impact, or dampness shall be prevented.

4. All typed of power charges in common use should be easily identifiable. A charge which is unfamiliar should not be used without adequate instruction in its safe use.

5. Suitable personal protective clothing and equipment shall be worn when using power-actuated tools.

SECTION XIV. CONSTRUCTION SAFETY

City employees are often involved in tasks related to the heavy construction industry. Heavy machinery is employed in public works projects to save time and labor, but the potential hazards to workers are multiplied in the process. The operation of construction machinery often do not have sufficient visibility to detect danger to nearby workers, or the ability to avoid an accident by quick reversal of controls. The machinery is designed to handle extremely heavy work, with the result that being struck by, or caught in or between such machinery and its loads, usually entails sever injured.

An immediate danger to workers lies in the potential for contact with electrical service or rupture of 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 a potential explosion and the leak must be stopped by trained personnel as soon as possible. Contact with a primary electrical circuit constitutes a shock hazard. An immediate report to the utility affected will avoid compounding the hazard. Additional information on underground or overhead services may be obtained by calling toll free 1-800-432-4770 call Sunshine 48 hours before digging.

Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident. Further, supervisors are to ensure each employee has demonstrated skill in the proper operation of each equipment item.

Some of the principal hazards affecting employees are:

1. Dig-up resulting in gas explosions, electrocution, flash burns, etc.
2. Rupture of gas, water and sewer facilities from using mechanical compaction, boring, or digging equipment.
3. Electrocution resulting from contact with overhead electrical wires.
4. Interruptions of electrical service or communication lines from digups, pole collapse, etc.
5. Fractures, strains, dislocations, death, etc. from cave-ins.
6. Strains from lifting material-handling tasks.
7. Eye injuries from dust and debris propelled by machinery and tools used in the operation.

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 by calling 1-800-432-4770.

- Instruction of workers about hazards involved as each job is explained to them.

- Use of approved protective clothing and equipment.

- Adherence to approved safe job procedures.

Construction Safety Procedures. Before work is started, supervisors will:

1. Check plans and other public utilities having service in the area of the job site to secure assistance in locating and protecting all underground or overhead services which may be affected. Additional information on underground or overhead services may be obtained by calling toll free 1-800-432-4770 call Sunshine 48 hours before digging.

2. 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 every worker.

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

A. Natural Gas Service

1. Inform all crew members of location and depth of buried pipelines.

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

3. Specifically instruct equipment operator to avoid contact 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. If a Gas Pipeline is Damaged

    a. Immediately call 911 and the gas utility service repair office and report the damage.

    b. Shut off all motors in the area.

c. Re move all flares or lanterns.

d. Enforce NO SMOKING in the area.

e. Do not operate gas valves.

f. **Do not** cover up damaged pipeline.

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

h. Request occupants to leave the area if gas odors are detected.

i. Re-direct traffic from the immediate area and notify Public Works and the Sheriff's Office of the situation.

j. Evacuate the immediate area but maintain eye contact with he area to restrain others from entering the area. Remian available to relay information to the Police, Fire or gas company personnel.

B. 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 guy wires and the possibility of damage to cables or collapse of a power pole line exists, consult the power company.

3. If excavating beneath buried conduit or cables, arrangements should be worked out in advance with the power company concerning maintenance of electrical service, proper support of exposed conduit, and suitable compacting or 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 10 feet from overhead electrical lines. When construction machinery is operated in close enough proximity to energize lines hat 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 machinery any closer than the minimum 10 feet clearance prescribed above.

6. Workers 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 to be especially watchful to prevent such contact.

   If Machine Contacts Energize Wires

   a. Have someone immediately contact 911 and the power service's repair office and notify them of the situation.

   b. The primary concern of persons on the rig is to leave the rig immediately. **Jump entirely free,** being very careful **no part of the body is in contact with the machine and the ground at the same time.**

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

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

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

C. Telephone Service

1. A guide should be posted on the surface to assist the machine operator. The guide should be stationed where he/she can be seen by the operator, outside the range of movement or hazardous area from loads, and should warn the operator of the presence of others who may enter the area.

2. Workers expose to vehicular traffic shall meet DOT safety requirements wearing warning vests constructed with reflective or high visibility material.

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 pacing and curb forms, etc. should not be used until determining the depth and location of buried telephone cables and conduit.

D. Excavation and Trenching Operations

1. A guide should be posted on the surface to assist the machine operator. The guide should be stationed where he/she can be seen by the operator, outside the range of movement or hazardous area from loads, and should warn the operator of the presence of others who may enter the area.

2. Workers expose to vehicular traffic shall meet DOT safety requirements wearing warning vests constructed with reflective or high visibility material.

3. All excavations of five (5) feet or more in depth and trenches of four (4) feet or more in depth shall be shored or sloped to the angle of repose in accordance with the State of Florida Industrial Safety regulations.

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

5. Workers in an excavation which is properly sloped or shored should not be in danger of being buried by cave-ins. However, accidents have occurred where workers 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 reap a pocket of air.

6. Excavated or other material shall be stored more than two (2) feet from the edge of the excavation and shall be so stored and retained as to prevent it from falling or sliding into the excavation site.

7. Trenches four (4) feet or more in depth shall be braced and shored unless they are solid rock or the sides are sloped to an angle of repose in accordance with OSHA 1926.652.

8. Trenches and excavations more than four (4) feet in depth shall have ladders placed at intervals which will provide readily accessible means of entrance and exit and each ladder shall extend from the floor of the trench to not less than three (3) feet above the top ground surface.

E. Materials- handling Machinery

1. When moving heavy object with a crane, proper lings and grips shall be used to secure the load to be suspended.

2. When guising a suspended load into position, non-conductive rope or nylon tag lines shall be used to permit maintenance of safe distance from the drop zone in case a suspended load should fall or contact an energized wire.

3. Employees should never crawl under mobile construction machinery during rest or lunch breaks.

4. Suspended load should not be moved over persons on the ground, or above persons working in an excavation.

F. Aerial Platforms and Baskets

The city employees use several kinds of mobile equipment with platforms or baskets which mechanically lift them to work on things too high to reach from the ground.

The following safety procedures are established:

1. All outriggers shall always be in a stabilizing position and locked before raising the basket.

2. Persons near the vehicle shall be given a verbal warning before the outriggers are lowered. DOT cones shall be placed by each outrigger.

3. When employees are 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 safety belt or harness worn by the employees.

G. Working in Public Right-of-ways

City employees are often required to work in and alongside rights-of-ways normally used for vehicular or pedestrian traffic in order locate utilities, perform tree trimming or landscaping tasks, edging and other maintenance activities. It is desirable, whenever possible, some continued flow of traffic be maintained with the least possible interference with normal traffic patterns. There are two safety consideration involved:

1. Protecting the employee from being struck by vehicular traffic.

2. Helping the public safely avoid hazardous obstruction, excavations, etc. which interrupt the flow of both vehicular and pedestrian traffic.

When road surfaces are being repaired, manholes opened, or excavations dug, it becomes necessary for adequate warning of hazards to be posted. The minimum amount of the right-of-way must be blocked off consistent with DOT safety requirements, and traffic must be efficiently rerouted.

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

Excavating utilities in the road may constitute interference 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 oscillating or rotating lights, or flashing arrow signs mounted on the vehicles should be used to identify these potential hazards.

The following safety procedures are established:

1. All workers exposed to vehicular traffic shall be provided with and required to wear warning vests meeting DOT requirements marked with or made of reflective or high visibility material.

2. Maintenance or construction activities shall use adequate signs and barricades shall be placed in accordance with the provisions of the Manual on Traffic Controls and Sage Practices, State of Florida, and Department of Transportation.

3. Road or street maintenance equipment, road or street maintenance vehicles, and road service vehicles shall be equipped with a flashing or rotating amber light.

4. Flagpersons will be utilized under the following conditions:

    a. To stop traffic intermittently as necessitated by work progress.

    b. To maintain continuous traffic past a worksite at reduced speeds to help protect the work crew.

    c. When traffic in both directions must use a single lane for a limited distance.

SECTION XV. CONFINED SPACES

City employees are frequently required to work in confined spaces. By definition, a confined space is “any space fully or partially surrounded by confining surfaces and any other structures or compartment surrounded by confining surfaces which may contain or permit the accumulation or flammable, explosive, toxic poisonous, or asphyxiant gases, vapors, or other materials or which may not contain sufficient oxygen to support life”. Examples are: tanks, digestors, barges, hoppers, bins, vaults, tunnels, ductwork, manholes, shafts, sewers and even open its where heavier-than-air gases may accumulate (i.e., chlorine rooms).

Records supporting accident statistics are fill of stories about people trapped in confined spaced and overcome by gases, fumes, lack of oxygen etc. May of these tragedies were compounded when would-be rescuers exposed themselves to the same situation without knowledge of what caused it to begin with, and thus also became casualties.

The hazards include flammable or explosive gases or vapors, toxic gases or vapors, and insufficient oxygen to support life. They can kill with frightening efficiency and lighting speed. Some are colorless, odorless and tasteless. With some, only a very small amount is dangerous.

Confined Space Safety Procedures:

1. Before entering confined spaces, a Supervisor will test to determine whether explosive, poisonous, toxic gases, or vapors are present.

2. Purging of hazardous atmosphere shall be accomplished before entering, whenever possible. Otherwise, proper respiratory equipment must be utilized.

3. Subsequent tests of the atmosphere shall be made at intervals frequent enough to ensure and maintain safe conditions, and a record of all tests shall be made.

4. When using portable blowers to ventilate, they shall be positioned to ensure the air intake will not pick up carbon monoxide fumes from the engine, and shall be placed at the lowers possible level.

5. **SMOKING** is prohibited in any underground operation or in other confined spaced.

6. All confirmed spaced which have previously contained, or which have the probability of containing toxic or poisonous material which can be absorbed through the skin, shall be entered only by persons properly equipped with protective clothing.

7. The controls of all power drivers, agitators, moving parts and moving equipment are an integral part of the installation within a confined space shall be disconnected, locked-out, or otherwise positively secured against operating while the confined space is occupied.

8. Lines, pipes, ducts and all other devices which may discharge, hazardous material into confined space shall be disconnected, blocked-off, locked-out, or otherwise positively secured against such discharge while the confined space is occupied.

9. A safety belt with lifeline attached shall be used by all persons wearing respiratory protective equipment in confined spaces. If respiratory protective equipment is not required, safety belts with lifelines shall be worn if the space contains water or liquids or other materials which will not safely support a person, or if the probability exist the atmosphere may become dangerous to life.

10. When entry to a confined space is through a top opening, the safety belt shall be of a type which suspends a person in an upright position.

11. When safety belts and lifelines are required, at least two standby attendants shall be designed to remain outside the space immediately available to render emergency assistance. Ince standby attendant shall have no other duties than to remain available for assistance, and shall be equipped with similar protective equipment as the person(s) inside the space.

12. When opening manholes, barricades and warning signs shall be used to protect pedestrian traffic and to alert vehicle traffic to the hazards as prescribed in Section IV, “Working in Public Right-of-Ways”.

13. Employees should not expose their hands or enter any confined space without carefully opening the access plate, cover, lid, or door and making sure no dangerous reptiles, animals or insects are occupying the space.

14. Exits should never be blocked.

15. Supervisors are required to take immediate corrective action to eliminate any unsafe acts or unsafe conditions which could or would result in an accident.

SECTION XVI. HAZARDOUS MATERIALS

As discussed in Section V, Right-to-Know, the City works to protect you against the dangers of hazardous materials. Although we take the necessary precautions to avoid an accident involving hazardous materials, there may be an occasion where these materials are spilled, are leaking from their containers, or are obsolete and need to be removed from the work site.

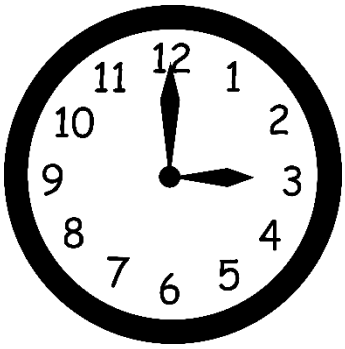
The City has entered into a contract with an outside vendor to provide hazardous materials response and collection services. This company is an on call 24 hours a day and will respond to hazardous materials emergencies and is also available for non-emergency clean-up, hazardous waste collection, and contamination assessments.

Should you experience any of these situations, the following procedures is to be followed:

1. Hazardous Material **Emergency** (Chemical spills, leaking tanks or cylinders)- This type of situation will be coordinated by the Fire Department and the emergency should be reported immediately to 911.

2. Hazardous Material **Non-Emergency** (Clean-up, Hazardous Waste Collection, Contamination Assessments) – These serviced are to be coordinated through the Public Works Administration office. They can be reached at 391-1611 or 391-9951.

SAFETY HAS NO



QUITTING TIME