

SAFETY MANUAL

CITY OF RIPON

ORGANIZED AND COMPILED BY

CITY ADMINISTRATOR

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INTRODUCTION

This safety manual is developed to provide City personnel with a planned program of action directed toward the recognition and elimination of unsafe conditions, practices, and procedures. The primary purpose of the manual is to assist in developing a guided and organized safety program.

In order to have a successful accident prevention program, it must be:

- PLANNED -- To fit the needs of the City.
- ORGANIZED -- To encourage willing participation by everyone.
- ADMINISTERED -- With interest and dedication to safety.
- STIMULATED -- To maintain interest and enthusiasm.
- EVALUATED -- To encourage new ideas and methods.

The manual is also concerned with the procedures to follow when accidents and injuries do occur. It furnishes forms for proper and complete reporting, investigation, and analysis of employee injuries. The information can be used for the control and elimination of future problems.

SAFETY MANUAL
OF THE
CITY OF RIPON

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GENERAL SAFETY RULES

A. CITY RESPONSIBILITIES:

1. Working Conditions:
 - a. The City shall maintain safe working conditions for all City employees and for encouraging and supporting an effective safety program.
 - b. The City shall formulate policies governing all aspects of safety including safe working conditions, protective equipment, maintenance of tools and equipment, assignment of employees to jobs for which they are qualified to perform safely, and correction of violations of safety procedures.
 - c. The City shall maintain proper planning of work and for seeing that the work plan is correctly followed, making available suitable protective equipment and seeing that it is used, and making frequent inspection of tools, equipment, construction sites and work areas to see that safety procedures are being followed.
 - d. The City shall make certain that employees are properly trained and understand the nature and extend of the work to be performed, the hazards that may exist, and the proper safety procedures to be followed in performing the work.

2. Employee Responsibilities:

- a. Each employee is responsible for doing his/her work in a safe and efficient manner in accordance with prescribed City standards and federal, state, and local regulations.
- b. No employee is expected to perform work for which he/she is not qualified to do or to work in the vicinity of equipment or areas without being familiarized with their possible hazards. If any employee is called upon to undertake work for which he/she considers him/herself unqualified to perform or which he/she feels is dangerous, he/she is responsible for calling the matter to the attention of his/her supervisor and resolving it before attempting the work.

- c. An employee shall not undertake a job unless he/she understands the instructions, the extent of the work to be done, and the applicable safety procedures.
- d. Employees shall be responsible for reporting to their supervisors defective or unsafe material, tools, or equipment, unsafe working conditions or procedures, and co-workers who appear ill or unfit to work. Each employee is also responsible for calling attention to unsafe practices to other coworkers.
- e. Each employee should always place him/herself in a safe and secure position before commencing and while performing work. When another employee is performing work that requires extreme caution, his/her attention should not be diverted by other employees.
- f. Employees shall obey all warning signs. Employees shall not engage in practical jokes or horseplay. Any employee who is under the influence of or has in his possession liquor, or narcotics, or who brings any of them on the job or to any place of business of the City shall be subject to the discipline that his/her actions warrant.
- g. Minors, visitors, or non-City or uninstructed workpersons shall be accompanied by a qualified City employee around City areas and properties which could present hazards to life, equipment, or property.

B. CLOTHING:

- 1. Employees shall wear suitable clothing at all times to minimize danger when exposed to electrical equipment, machinery or hazardous substances or any other conditions affecting the safe performance of their duties.
- 2. Employees shall wear head protection in areas that require it.

C. SMOKING:

- 1. Employees shall not smoke near flammable liquids, explosives, or gases. Employees shall also not smoke where "No Smoking" signs are displayed or in areas indicated as danger zones.
- 2. Do not discard matches, cigars, cigarettes, or other burning substances, except into their proper receptacles.

D. POISONS:

1. An employee shall familiarize him/herself with the hazards involved before handling poisonous, infectious, or corrosive substances, such as acids, solvents, leads, etc. Employees should use all precautions and protective equipment when handling these substances.
2. Do not handle food, tobacco, etc., with such poisonous substances on your hands.

E. GOVERNMENTAL SAFETY STANDARDS AND CODES:

1. In addition to Public Works Safety Rules and Procedures, the City and its employees are also subject to the regulations of various federal, state and local governmental agencies.

F. ACCIDENTS:

1. Employee Personal Injury:
 - a. An employee shall report every injury received while on duty for the City, however slight, to his/her supervisor as soon as possible.
 - b. If possible, report all serious injuries immediately. Call a doctor, ambulance, or other emergency service and direct them to the scene of the accident.
 - c. Caution should be exercised when transporting an injured employee. In all cases of serious injury, request the services of an ambulance.
2. Non-Employee Injuries or Damage:
 - a. Employees shall report to the Personnel Office all injuries to non-employees involving the City and all cases of damage to non-City property.
 - b. Obtain names and addresses of all witnesses. Do not assume responsibility for any accident beyond first aid treatment. Do not admit liability or indicate that the City will make a settlement. Do not discuss the accident with any person not in the employ of the City, except for law enforcement officials.

3. Traffic Accidents:

- a. An employee shall report any traffic accident incurred while on City business, if possible, even if he/she is operating a personal vehicle.
- b. The driver of the vehicle involved in an accident shall submit an accident report to the City Administrator as soon as possible. These forms are located in each vehicle. If the employee is injured in the accident, he/she shall report to the Personnel Office to file an injury and accident report.

SHOP SAFETY

A. BUILDING MAINTENANCE:

1. Keep buildings and yards free of trash and unnecessary debris.
2. Do not clean floor with flammable materials. An employee shall use personal protective equipment and have adequate ventilation when using toxic cleaning agents. Use approved sweeping compounds to prevent irritating, and possibly, harmful, airborne dust.
3. Maintain clear aisle access to fire control equipment, fuse boxes, switchpanels and exits.
4. Do not place broken glass, metal scraps or wire in wastepaper baskets. Put them in special containers.

B. COMBUSTIBLE MATERIALS:

1. Do not allow combustible material such as oil-soaked rags, paint-covered cloths, shavings and other debris to accumulate. Use self-closing fireproof containers to deposit all combustible materials. These containers should be emptied frequently and the contents disposed of safely.
2. Dispose of used packing supplies at once. This material should not be allowed to accumulate unless placed in approved fire-proof containers.
3. Projecting nails on packing cases, barrels, boxes, used lumber, etc., should be removed or bent flat.
4. Paint shall be stored in closed cans. Open cans of paint are to be protected against ignition when in use.
5. Avoid spilling or dripping oil, grease or other similar material on equipment or floors. Clean up all spills immediately. Use only approved absorbents to dry up flammable spillages. Sawdust and wood shavings are, themselves, flammable.

C. FIRE PROTECTION:

1. Each employee shall be aware of fire hazards and know the location and proper use of all fire fighting equipment in his/her assigned work area. Each employee shall be familiar with all exits in his/her work area.

2. All fire fighting equipment shall be accessible and shall be maintained in accordance with the Fire Marshal's and the District's instructions. Any extinguisher which has been used or is not in good operating condition should be turned in promptly for repair or replacement. Anytime extinguishers or other fire fighting equipment are used, they should be returned to their ready condition immediately.

D. FIRE PREVENTION:

1. Be alert for malfunctioning equipment indicated by overheating, arcing, sparking, or smoking. If any employee finds such equipment he shall notify his supervisor or the Director.
2. Employees shall obey all "No Smoking" signs.
3. Use only labeled safety containers (OSHA approved) to handle flammable liquids. Bulk storage for flammable liquids in enclosed areas shall be limited to twenty-five gallons in proper containers. The enclosed area shall be well-ventilated.
4. If a flammable liquid or gasoline leak or spill occurs, promptly remove all ignition sources from the area and thoroughly ventilate until the leak has been repaired and the spill cleaned up.
5. All gasoline-powered vehicles or equipment shall be refueled outdoors whenever possible, or in a well-ventilated area. Ignition and mobile radios must be in the "Off" position. Smoking and other ignition sources will not be allowed in the refueling area. Keep the filling nozzle in contact with the metal fuel tank to avoid ignition by static electricity.
6. Do not undertake major repairs on tanks or containers carrying or having flammable liquids. Minor repairs may be made with the permission of the Director or Supervisor and shall be undertaken with the proper methods.
7. Only approved absorbents shall be used to dry up spillage of flammable liquids.
8. All fire doors shall be kept in good operating condition and free from obstructions. Report defective fire doors promptly. Fire doors shall not be

blocked open.

E. COMPRESSED GASES:

1. Employees shall exercise care in handling all compressed gas cylinders. These cylinders shall not be dropped, jarred, or exposed to temperature extremes.
2. Cylinders shall have the valve cap or valve protection device in place at all times, except when in use.
3. Cylinders shall not be rolled or lifted by the valve or valve cap. A suitable cradle or other device shall be used.
4. The contents of each cylinder shall be properly identified.
5. Cylinders, whether full or empty, shall be stored in an upright position and chained or secured so they cannot fall over.
6. A minimum distance of twenty feet or a five foot high noncombustible barrier shall separate oxygen cylinders in storage from fuel gas cylinders or other combustible materials.
7. Do not place cylinders where they could become part of an electric circuit or within five feet of an electrical outlet.
8. Hydrogen and fuel gas cylinders shall not be stored inside any operating building. They shall be stored in separate storage buildings or sheltered storage areas.
9. Never force connections which do not fit and never tamper with the safety relief devices of cylinder valves.
10. Before removing the regulator from a cylinder, an employee should assure that the valve is closed and all pressure released from the regulator.
11. Do not use a leaking cylinder. Such cylinders shall be taken outdoors away from sources of ignition and the supervisor shall be notified.
12. Never use a flame to detect a gas leak. Use detector or soapy water.
13. Employees shall not use the recessed tops of cylinders as a place for tools.
14. Employees shall not attempt to mix gases in a cylinder or to transfer gas from one cylinder to another.

15. A sign reading "Danger-No Smoking, Matches, or Open Lights" or similar wording shall be conspicuously posted in rooms or entrances to areas where fuel, gas or hydrogen is used or stored.
16. Hydrogen - employees shall take special precautions when using hydrogen to avoid the possibility of fire and explosion.
17. Oxygen - Do not allow oil, grease, or similar materials to come in contact with any valve, fitting, regulator, or gauge of an oxygen cylinder.
18. Acetylene - Acetylene cylinders shall be properly secured and always be used, transported, or stored in a vertical position. These cylinders shall be kept away from contact with sparks, flames, and energized electrical equipment.
19. Chlorine - Store chlorine containers in a cool place. These containers should be properly secured and protected against moisture. Special precautions shall be taken to prevent accidental discharge of gas and protective equipment shall be readily available if needed. Never store or use chlorine cylinders near flammable materials. If a leak does develop, the cylinder shall be placed so that only "gas" escapes. An ammonia swab may be used to detect leaks. Do not spray or pour water on chlorine leaks. Should a leak develop, self-contained breathing apparatus shall be used before entering the area to investigate or repair the leak.

F. GAS WELDING AND CUTTING:

1. Only properly instructed employees shall perform welding and cutting.
2. When employees are welding or cutting in elevated positions, they shall take precautions to prevent sparks or hot metal from falling onto people or flammable materials below.
3. At all locations where welding or cutting equipment is used, suitable fire extinguishing equipment shall be made immediately available.
4. No welder or helper shall carry matches when engaged in welding or cutting operations.
5. Do not use matches to light a torch. A friction lighter or stationary pilot light shall be used. Do not light a torch on hot work.

6. If welding or cutting is performed in locations where combustible materials are present, a fire watch shall be maintained. One-half hour after completion of welding a fire check shall be made of the area.
7. Before commencing welding in an area where combustible materials such as paper clippings or wood shavings are present, the floor shall be swept clean for a radius of thirty-five feet. Combustible floors shall be kept wet or protected by fire-resistant shields. Employees operating welding or cutting equipment where floors have been wet down shall be protected from possible shock.
8. Approved back flow check valves shall be used on gas welding rigs in both gas and oxygen lines.
9. Do not repair welding hose with tape.
10. Employees shall thoroughly clean and decontaminate machinery, tanks, equipment, shafts, or pipes that could contain explosive or flammable substances prior to the application of heat.
11. Dusty or gaseous spaces where there is a possibility of an explosion shall be adequately ventilated before welding or cutting equipment is used.
12. While welding in confined spaces, or while brazing, cutting or welding zinc, brass, bronze, stainless steel or galvanized or lead coated material, employees shall maintain adequate ventilation or use approved respiratory equipment.
13. Cadmium bearing materials - Employees shall use proper respiratory protection when welding or cutting cadmium bearing metals. Local exhaust ventilation or airline respirators shall be used indoors or in confined spaces. Outdoors, employees shall use approved fume respirators or airline respirators.

G. ELECTRIC WELDING:

1. Only authorized employees who are experienced and properly trained shall operate electric welding equipment.
2. Prior to its use the electric welding machine shall be properly electrically grounded.
3. In the area where electric welding is taking place, suitable extinguishing equipment shall be made readily available.

4. Employees shall follow the operating instructions supplied by the manufacturer or affixed to the machine.
5. The operator shall wear an approved helmet, proper protective gloves and clothing. Helpers shall wear proper eye protection. Other employees shall not observe electric welding operations.
6. When other persons could be exposed to the arc of the welding operation, welding screens shall be used. A welder shall not strike an arc with an electrode when there are persons nearby who could be affected by the arc.
7. When electrode holders are left unattended, the electrodes shall be removed and the holders shall be placed or protected so that they cannot make electrical contact with employees or conducting objects.
8. If the welder must leave his/her work or stop work for any extended periods of time, or if the welding machine is to be moved, the power supply switch to the equipment shall be opened.

H. WHEN A FIRE OCCURS:

1. If an employee discovers smoke or a fire, he/she should promptly call the Fire Department and then notify his/her supervisor immediately.
2. An employee should not attack a fire singlehanded unless he/she is absolutely certain that he/she can extinguish the fire by the use of one extinguisher. If it appears the fire might get out of control notify the Fire Department.
3. All electrical equipment involved in a fire shall be promptly deenergized.
4. Any area in which a carbon dioxide extinguishing system has operated shall be thoroughly ventilated before entering.

PERSONAL PROTECTIVE EQUIPMENT

A. SAFETY HATS:

1. Employees shall wear City provided safety hats, commonly known as "hard hats" in areas where work is being performed overhead, where the possibility of striking an object exists, where energized conductors are nearby or in any other area designated as a "hard hat area".

B. EYE PROTECTION:

1. Employees shall wear the City provided eye protection that is best suited for maximum protection and comfort when engaged in any job or when near any work area where there is a danger of an eye injury.
2. All employees whose duties require that eye protection be worn shall wear eye protection.

C. NOISE PROTECTION:

1. Employees shall wear City provided hearing protection in areas where sound levels are determined to be above limits set by government safety codes and regulations.

D. GLOVES:

1. Employees shall wear work gloves when handling materials, or using tools which may cause blisters, burns, or cuts.

E. SAFETY SHOES:

1. The City encourages employees to wear safety shoes to protect against foot injuries. Some work locations require the wearing of foot protection.

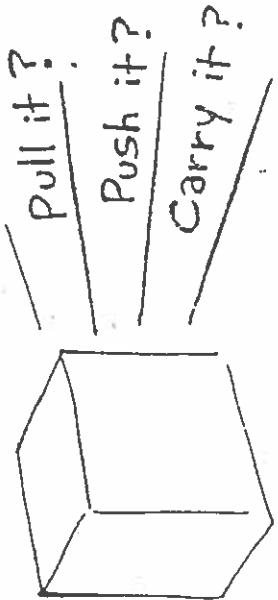
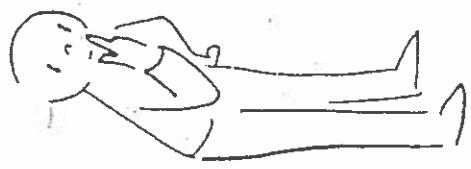
PROPER METHODS OF LIFTING AND CARRYING

1. Estimate the size and weight of any object before lifting it. Check for sharp edges, slivers, protruding nails, grease, or other things that might cause injury. Wear gloves and use mechanical aids wherever possible.
2. If the object is too large or too heavy to handle do not hesitate to ask for assistance.
3. When lifting, get a good grip on the object, keep the feet apart, be sure of your footing and bend the knees. Keeping your back as straight as possible, lift by straightening the legs. The back may not be vertical, but it should not be arched. Keep the load as close to your body as possible.
4. When carrying the load do not try to change its position or adjust your grip. Rest the load on or against something for support, then make the change.
5. When lifting an object from a bench, table, etc., hold the object as close to your body as possible, keep the back straight, and lift the legs.
6. When two employees are carrying a long pipe or a similar object, it should be placed on the same side of the body of each carrier.
7. When lifting an object to shoulder height or above the head, first lift the object waist high and rest it on a support. Get a firm grip and then bend the knees to give added power from the leg muscles for the final lift.
8. Bend the knees when setting an object down. Set one corner or hands away so they won't be pinched. Use bolsters to place load whenever possible.

The ABC's of **MOVING THINGS** Safely



How should I move it?

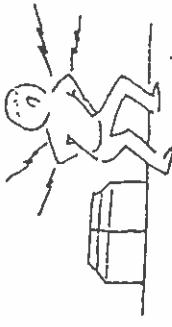


Pull it?
Push it?
Carry it?

THE SAFE WAY IS THE RIGHT WAY

Moving Things the wrong way may cause --

① STRAINS



-- stretching a muscle beyond its proper limits -- when you feel the pain it's too late to do anything about it -- the muscle is already injured.

② SPRAINS



-- a weakening of a joint and related muscles by sudden or excessive exertion;

③ HERNIAS



-- protrusion of an organ (often the intestines) because of a pulling apart of the body's muscle lining

④ WOUNDS



-- cuts and bruises usually on hands, fingers, feet or toes.

⑤ FRACTURES



-- breaking or cracking bones -- usually the result of jamming fingers or dropping objects on toes.

All mean suffering and may require medical attention and hospitalization

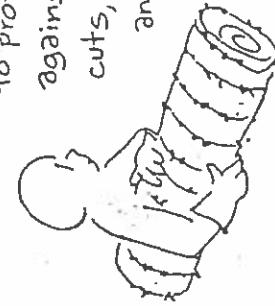
Most accidents resulting from moving things can be **PREVENTED** when you follow these

6 BASIC SAFETY TIPS

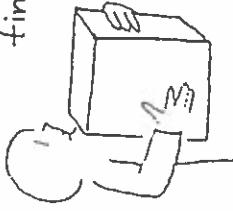


1. KEEP HANDS in the "CLEAR"...

to protect against slivers, cuts, scratches and burns.



fingers can be crushed when load is put down carelessly.

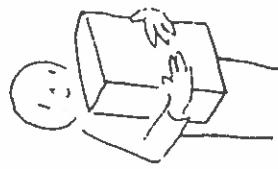


4. WEAR GLOVES...

to protect against slivers, cuts, scratches and burns.

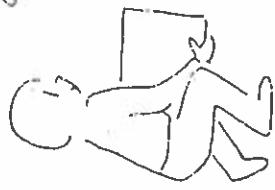
3. GET A GOOD GRIP...

to make carrying easier and to protect your fingers and toes.



5. LIFT WITH YOUR LEGS...

don't really "put your back into it"

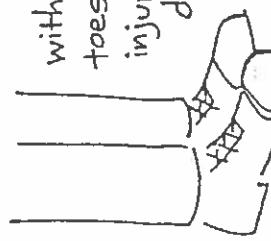


to make carrying easier and to protect your fingers and toes.

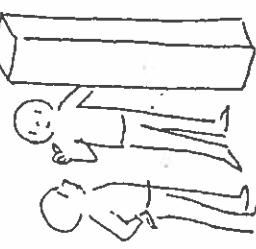
6. GET A GOOD POSITION

7. WEAR SAFETY SHOES

with reinforced toes to prevent injuries from dropped objects.



if there is any doubt about your ability to move the object by yourself.



8. GET HELP

SEE PAGES 6 & 7

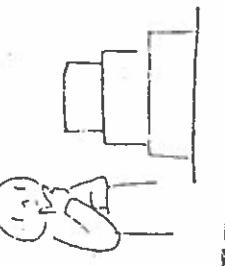
WHEN YOU (A) Plan the move 8 & 9
(B) Know the right way to lift 10
(C) Know how to carry objects 11
(D) Know how to set them down 11
(E) and know the proper way to push and pull 12

(A) PLANNING

makes any job easier

1 DECIDE

in advance
how you
are going
to do the job.



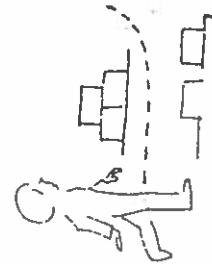
When you
PLAN
before acting
you get
the
job done
SAFELY
EASILY
QUICKLY

and
EFFICIENCY



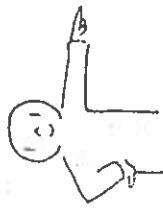
2 PLAN

the route you
will take--
free from tripping
hazards.



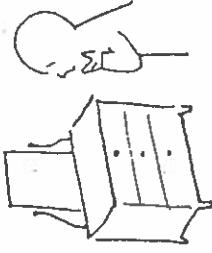
3 DETERMINE

where the
object will be
set down--will
you need help?



4 LOOK OVER

the object to
see where and
how to hold it.



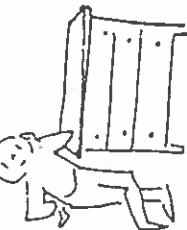
5 REMOVE

grease and oil
from object
so it is as dry as
possible.



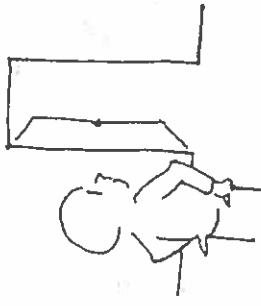
6 CONSIDER

the distance the
load is to be
moved. Plan rest
stops if necessary.



7 BE SURE

there is enough
space to handle
the object safely.



8 USE

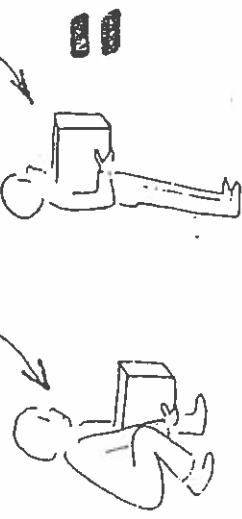
lift truck or
conveyor for
things not meant
to be moved
by hand.



(B) The "know-how" of LIFTING

LIFTING from

HERE to HERE



a one-man job because you can use your leg muscles.

the object to be lifted. Make sure it's not too heavy or too clumsy for good balance.



① LOOK OVER

to the load with feet apart for good balance. One foot alongside the load - one behind.



② STAND CLOSE

"Straddle" the load somewhat. Keep your back as straight as possible.



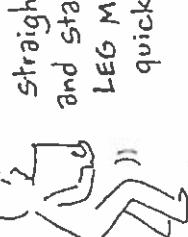
③ BEND YOUR KNEES



④ GET A GOOD GRIP

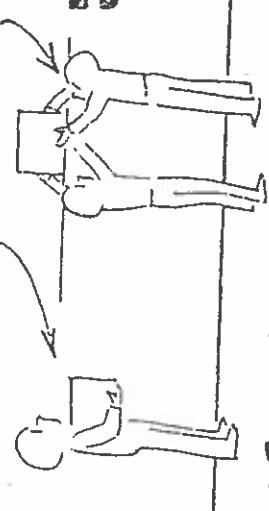


⑤ LIFT GRADUALLY



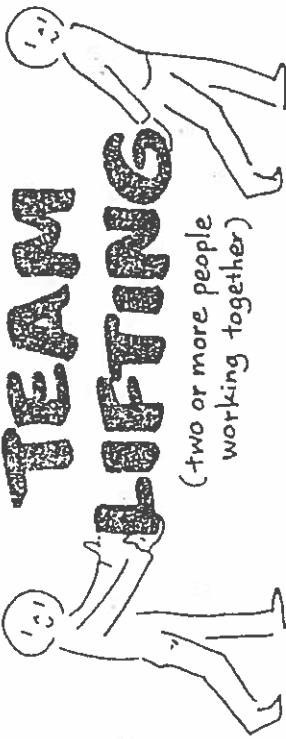
straighten your knees and stand. USE YOUR LEG MUSCLES. Avoid quick jerky motions.

But from HERE to HERE



a two-man job because lifting is done with weaker arm muscles.

If an object is too heavy, large, bulky, long, hard to handle, or has to be placed high up, try



TEAM LIFTING

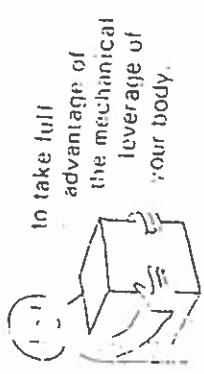
(two or more people working together)

Workers should be about the same size. One man should give signals so that all work together.

(c) The "know-how" of CARRYING and

(D) "UNLIFTING" i.e., putting it down

① KEEP the LOAD CLOSE to your BODY



In take full advantage of the mechanical leverage of your body.

② ALWAYS HAVE CLEAR VISION



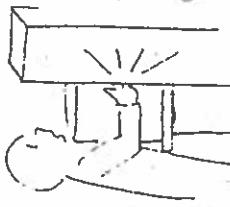
over the load
... AND if the load interferes with normal walking, get help.

① BEND YOUR KNEES



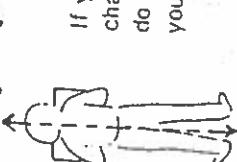
to lower the load ... keeping your back straight and the weight close to your body.

② WATCH YOUR FINGERS



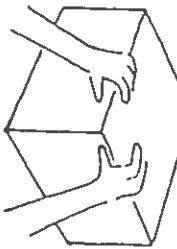
Allow room for the load without danger to your fingers or toes.

③ AVOID TwISTING YOUR BODY



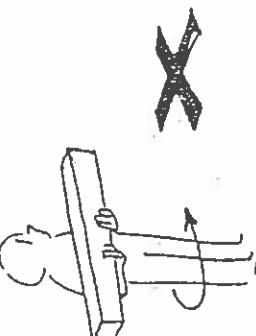
If you have to change direction, do it by moving your feet

④ DON'T CHANGE YOUR GRIP



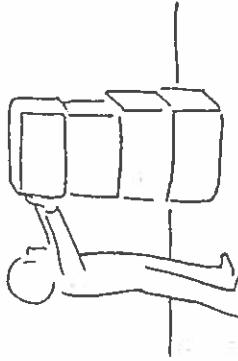
on the load unless its weight is supported.

⑤ FACE the SPOT your LOAD IS TO REST ON



Turn your feet and whole body in the right direction.

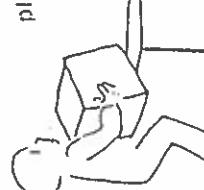
④ BE SURE THE LOAD IS SECURE



where you put it down.

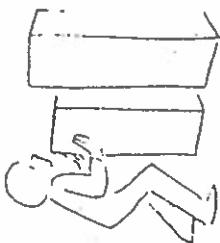
Will it fall, tip over, roll off or be in someone's way?

④ To deposit load on BENCH or TABLE



place it on the edge and push it forward with arms and body.

⑤ SLIDE LOAD



into tight spaces ... it's much easier and safer than trying to lift.

PUSHING and PULLING

Keep the strain off your back--let your body's weight and your leg muscles do the work for you.

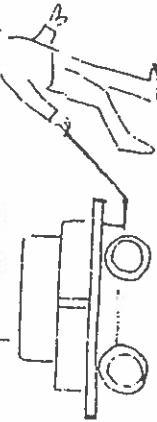


① Get a good **GRIP**

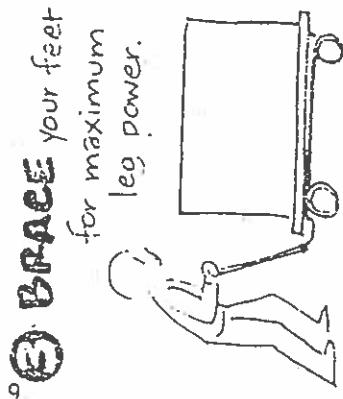
on the
subject.

② Keep your back as
STRAIGHT

as possible.



③ **BRACE** your feet
for maximum
leg power.



④ **BEND** your
knees to get
the best use of
your body
weight to
move the
object.

DON'T BE A WRESTLER

If the object is too big or awkward--get help.

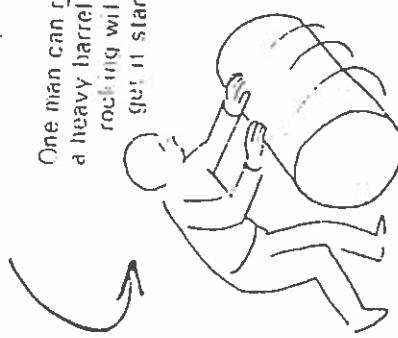
HANDLING SPECIAL-SHAPED OBJECTS

BARRELS, DRUMS and KEGS

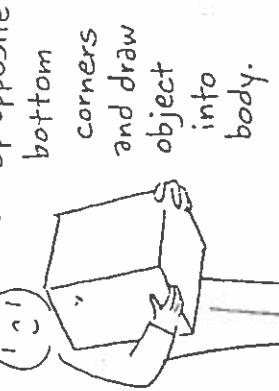
But it could take
two men to move
the same barrel
on end



One man can roll
a heavy barrel
rocking will help
get it started

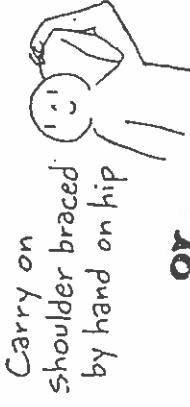


BOXES and CARTONS



Grasp opposite
bottom
corners
and draw
object
into
body.

SACKS



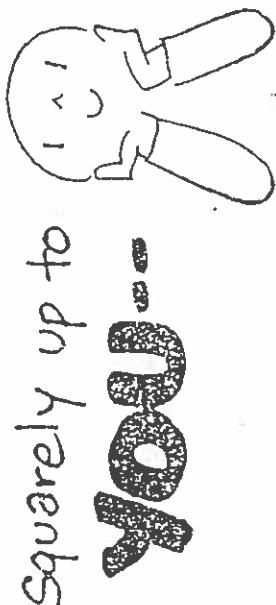
Carry on
shoulder braced
by hand on hip

or

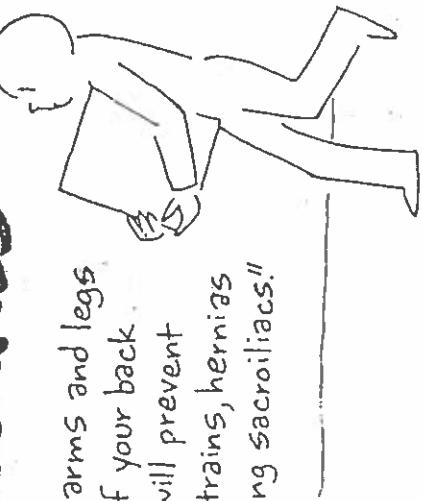
hold at opposite
ends and rest
load against
your hip and
stomach.



DO--being safe when handling objects is



② KNOW HOW TO MOVE MATERIALS



Use your arms and legs instead of your back and you will prevent sprains, strains, hernias and "aching sacroiliacs!"

Only you can judge how much you should move. Only you know of physical conditions that might prevent you from moving objects.

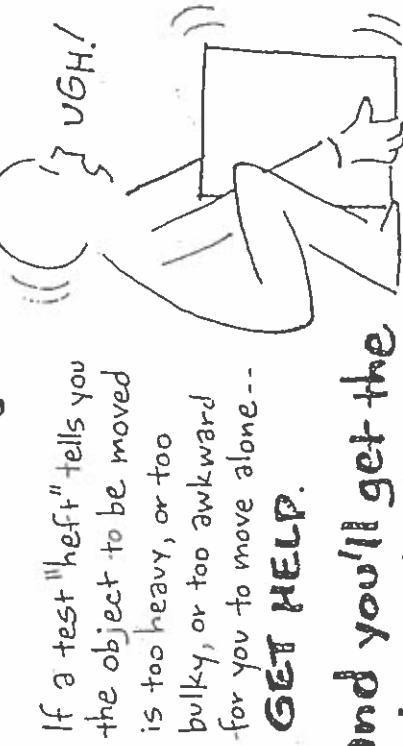


③ KNOW YOURSELF



Only you can judge how much you should move. Only you know of physical conditions that might prevent you from moving objects.

④ KNOW WHEN TO GET HELP



UGH!

If a test "heft" tells you the object to be moved is too heavy, or too bulky, or too awkward for you to move alone--

GET HELP.

-- and you'll get the job done SAFELY and EASILY EVERY TIME

AND if you--

- a. are underweight or overweight
- b. have deformities of the spine
- c. are arthritic or have previous injuries to joints
- d. are handicapped or have medical problems of any kind (limp, disease, etc.)
- e. have special medical problems (e.g., weak heart, high blood pressure, etc.)

BE EXTRA CAREFUL

moving heavy objects, especially

TOOLS AND EQUIPMENT

A. HAND TOOLS - GENERAL:

1. Employees shall use only tools that are City approved and properly maintained. Each user is responsible to inspect tools each time before using.
2. Tools shall be kept clean and the cutting edges of tools, such as knives and chisels shall be kept sharp.
3. Tool handles that are cracked or splintered shall be replaced.
4. When using a knife, always make strokes away from the body.
5. Carry tools in a tool box, tool bag, or tool belt. Edged or pointed tools shall have guards whenever possible.
6. Tools or materials shall not be left in elevated positions unless protected from falling. Employees shall not throw tools.
7. Tools shall not be left to lie around. They shall be returned to their proper places.
8. When working with tools they may cause flying particles, employees shall protect their eyes by wearing City provided eye protection.
9. Employees shall not use metallic measuring tapes, cloth measuring tapes with metal reinforcement or metallic rules near electrical equipment.

B. HAMMERS:

1. Employees shall use the correct hammer for the job. In using a sledge or maul, an employee shall make sure he/she has sufficient clearance all around before swinging.

C. SHOCK TOOLS:

1. Chisels, concrete points, drift pins and similar tools that are being struck with a sledge hammer shall be supported with tongs or holders. Employees shall not hold them with their hands.
2. Employees shall not strike tools with similar hardness against each other.
3. Employees shall not use shock tools, such as chisels or punches, after the head becomes mushroomed or fractured. Tools in this condition must be replaced, repaired or dressed before further use.

D. SCREWDRIVERS:

1. When using a screwdriver do not hold the material in the palm of your hand as the screwdriver could slip and cause injury.
2. Screwdrivers with metal continuing through to the end or sides of the handle shall not be used near electrical equipment.

E. WRENCHES:

1. It is better to pull a wrench than to push it. If it is necessary to push, use the open palm. If an employee is using an adjustable wrench he should exert pressure toward the movable jaw. An employee shall stand to one side when pulling down on wrenches above his head.
2. Employees shall not hammer on a wrench or use a pipe to extend a wrench handle unless the wrench was designed for that purpose.

F. FILES:

1. Files, rasps, and other tools that have sharp tangs shall be equipped with approved handle. Employees shall not use a file for a pry.

G. SAWS:

1. Saws shall be kept sharp and free from rust. Saws shall be provided with suitable guards unless compartments are provided for their storage. When a hacksaw is being used, the blade shall be kept tight and rigid in the frame.

H. PRY BARS:

1. When using pry bars be sure that the "bite" is secure. Be in balance so you won't fall if you lose your "bite".
2. Bars or other long narrow tools shall be laid down when not in use to prevent their falling and causing injury.

I. LIFTING JACKS:

1. Be certain that a jack is of sufficient strength for the load and that the pawl properly engages in the ratchet teeth.
2. Jacks shall be secured on a solid base before starting a lift.
3. Do not rely on hydraulic jacks to support a load. Block up the load after lifting.

POWER TOOLS AND ELECTRICAL EQUIPMENT

A. GENERAL:

1. Employees shall operate only the power tools they have been trained and authorized to use.
2. Before using a power tool, make a visual inspection. If an employee feels the tool is unsafe he shall report it to his/her supervisor.
3. All power tools shall be kept in good operating condition and inspected at regular intervals. Records of inspection shall be kept to ensure proper maintenance of tools.

B. PNEUMATIC TOOLS:

1. During inspection, give special attention to exhaust valves, connections, and lubrication.
2. Before disconnecting the line from any tool or connection the pressure shall be cut off, and the air exhausted, except for quick charge couplings.
3. Before making any changes in air tool points or adjustments to the air tool, shut off the air and disconnect the tool from the line.
4. Employees shall not use compressed air to clean clothing or point an air hose at any person.
5. Leaky or defective hoses shall be removed and replaced.

C. ELECTRICALLY OPERATED TOOLS:

1. Inspect the electric cord each time the tool is used. Do not lower or lift tools with the electrical cord.
2. While connected to a source of power, always ground the casing or frame of the tool unless it is double insulated.

D. EXTENSION CORDS:

1. Employees shall use only City provided extension cords.
2. Only three-conductor power extension cords or cords with provisions for grounding with portable electric tools shall be used.
3. Extension cords shall be inspected frequently for kinks, worn insulation, and exposed strands of wire. Repairs shall be made by authorized personnel only.

4. Employees shall not use extension cords on wet floors.
5. When using hand trucks or carts do not push them across extension cords. Lift the cord over the vehicle.

MACHINE TOOLS

A. POWER MACHINES:

1. Only authorized employees shall be allowed to operate power machine tools.
2. Before an employee turns on a machine he/she shall make certain that everyone is clear and that guards and safety devices are in place and properly adjusted. Guards and safety devices shall not be tied down or blocked out.
3. Do not operate a machine that has a missing or broken guard.
4. Machines shall not be left running unattended.
5. When a machine needs maintenance or repair, turn off the power and wait until the machine has come to a complete stop. Do not try to slow down moving machinery with your hands or with some makeshift device.
6. All machines shall be kept clean and free of tools, rags, and other debris. If it is necessary to remove chips from a moving machine, do it with a brush or stick; not with your hands.
7. Employees shall not wear loose fitting clothing, such as ties or unbuttoned shirt sleeves around machinery. Gloves shall not be worn where they could be caught in the machinery.
8. When an employee is operating a machine where there is the possibility of flying particles, he/she shall wear a face shield in addition to safety glasses.
9. Employees shall use caution when using cutting oils and solvents. To prevent skin irritations wash properly and use protective creams, if necessary.

B. GRINDERS:

1. Employees shall wear face shields along with safety glasses when operating portable or stationary grinders or wire wheels.
2. All grinders, both portable and stationary, shall be fitted with wheels designed for the operating speed of the grinder as shown on the heel.
3. Work rests shall be set a maximum distance of 1/8" from the wheel to prevent work from being caught between the wheel and the rest.
4. Work rests shall not be adjusted while the wheel is in motion.

5. Tongues shall be kept adjusted so they are no further than 1/4" from the grinding wheel.
6. All stationary power grinders shall have guards of the hood type that do not expose more than one-fourth of the circumference of the wheel and are strong enough to withstand the shock of a bursting wheel.
7. All portable grinders shall have a hood or band-type guard strong enough to withstand the shock of a bursting wheel where operation and nature of the work will allow it.
8. When using a cold wheel, give it a chance to warm up by applying work against it gradually.
9. Employees shall not grind on the side of a wheel, except with a special purpose wheel.

LADDERS AND SCAFFOLDS

A. LADDERS - GENERAL:

1. Employees shall use only City provided ladders. Makeshift devices shall not be used.
2. Ladders shall be inspected for defects before each use.
3. Ladders with defects shall not be used.
4. When on a ladder, do not overreach. Keep your navel within the side rails of the ladder. Move the ladder as your work progresses.
5. Block aisles or lock doors when ladders are placed near them. Place warning signs and barricades.
6. An employee shall face the ladder when climbing up or down, and shall use both hands. Hand tools and other equipment shall be hauled up and down with a hand line. Employees shall not carry tools in their pockets or throw them to other individuals. Tool pouch worn on belt is O.K.
7. Only transparent preservatives or coating shall be used on wood ladders. Do not use paint which might obscure a defect in the wood.

B. EXTENSION LADDERS:

1. The bottoms of extension ladders shall have grippers, or cleats, to prevent slipping. If non-slip bases are not effective, the ladder shall be lashed, blocked, or held.
2. If an extension ladder is used to climb onto a work platform, it must extend at least 3 1/2' above the platform level and must be securely lashed.
3. Extension ladders shall be placed so the distance from the base to the wall is one-fourth the length of the ladder. Be sure that the safety catches are properly latched before placing weight on the ladder.

C. STEPLADDERS:

1. Make sure the ladder is level and the locking device set before ascending.
2. Stepladders of more than ten feet high must be held by another employee, unless the ladder is lashed or blocked.

3. Do not stand on the two highest steps unless they are specifically designed for it.
4. Employees shall not use a stepladder more than twenty feet in height.
5. No one shall be permitted to stand and work on the top three rungs or cleats of a ladder unless there are members of the structure that provide a firm hand hold or the worker is protected by a safety belt.

D. SCAFFOLDS:

1. Before employees, equipment, or materials are supported on a scaffold, it shall be determined that the scaffold is sufficiently strong and properly secured. A scaffold must be capable of supporting at least four times the maximum load intended.
2. All planking used for scaffolding must meet the requirements of scaffold planking specifications.
3. Employees shall not jump onto or from a scaffold.
4. All objects which are likely to fall from the scaffold shall be secured or removed when stopping work for meals or when leaving the job for the day.
5. Ladders shall not be used to make a scaffold platform.
6. To prevent shifting, scaffold planking shall be cleated.

WORK AREA PROTECTION

A. GENERAL RULES:

1. Employees working in areas where there is pedestrian or vehicle traffic shall be responsible for establishing adequate safeguards for the protection of such pedestrians or vehicles. Proper work area protection shall be accomplished by the use of adequate warning and protective devices on approaches to work area.
2. The public shall have adequate advance warning, and shall be regulated and guided safely through or around the work area. Work area protection shall be planned and established to ensure the safety of not only the public, but also the employees in the work area and the equipment.

B. EQUIPMENT:

1. Employees shall use only those signs, barricades, and other warning and protection devices which conform to state and local codes.
2. When providing work area protection, employees shall follow all state and local traffic codes.
3. Special precautions shall be taken during night operations or during periods of reduced visibility. Flashing lights, flares, area illumination or other adequate warning devices shall be used.
4. As soon as the hazard has been eliminated, all warning devices and protection equipment shall be removed.
5. Warning devices and protection equipment not in use shall be stored in a proper manner.

C. FLAGPERSON:

1. When there is any doubt that effective protection can be provided by signs or barricades, flagpersons or other traffic control shall be used.
2. Flagpersons shall wear a red or orange warning vest or other garment. At night flagpersons shall wear warning garments made of reflecting material.
3. Hand signaling equipment shall conform to the following requirements:
 - a. Signal flags shall be red and at least twenty-four inches square.
 - b. Sign paddles to signal "stop" or "slow" shall be used.

- c. Red lights shall be used at night or in periods of reduced visibility.
- 4. To reduce the chances of injury from vehicular traffic, flagpersons shall place themselves in a protected position.
- 5. Flagpersons shall be in such a position so that they can fully observe the work area and shall guide vehicular traffic in such a manner as to minimize the possibility of accidents.
- 6. When flagpersons are stationed at both ends of a work area, reliable communications or prearranged signals shall be used to ensure proper traffic flow.
- 7. Flagpersons shall face traffic when giving signals and all signals shall be positive, direct, and shall leave no doubt as to their meaning.

CONFINED SPACES

A. DEFINITIONS:

1. Confined Space: A space defined by the concurrent existence on the following conditions:
 - a. Existing ventilation is insufficient to remove dangerous air contamination and/or oxygen deficiency which may exist or develop.
2. Pre-Entry: The air shall be tested with an appropriate device or method to determine whether dangerous air contamination and/or oxygen deficiency exists and a written record of such testing results shall be made and kept at the work site for the duration of the week.
3. If dangerous air contamination and/or oxygen deficiency does not exist within the space, as demonstrated by tests performed in accordance with (2) above, entry into and work within the space may proceed subject to the following provisions:
 - a. Testing shall be conducted with sufficient frequency to ensure that the development of dangerous air contamination and/or oxygen deficiency does not occur during the performance of any operation.
 - b. An approved safety harness with an attached line shall be used. The free end of the line shall be secured outside the entry opening. The line shall be at least 1/2" diameter and 2000 pounds test.
 - c. At least one employee shall stand by on the outside of the confined space ready to give assistance in case of emergency. At least one additional employee who may have other duties shall be within sight or call of the standby employee.
 - d. A standby employee (or employees) protected as prescribed by (c) may enter the confined space, but only in case of emergency and only after alerting at least one additional employee outside of the confined space of the existence of an emergency and of the standby employees intent to enter the confined space.

MOTOR VEHICLE AND HEAVY EQUIPMENT OPERATION

A. GENERAL:

1. Only employees who are specifically authorized and who possess a valid license or permit for the equipment being used shall operate City motor vehicles, or personally owned vehicles on City business.
2. All state and local motor vehicle laws shall be obeyed, including speed laws. Drivers shall give consideration to traffic, road and weather conditions in determining the safe speed within the legal limit at which the vehicle shall be operated.
3. Employees shall not permit unauthorized persons to drive, operate or ride in or on a City vehicle.
4. In vehicles where seat belts are provided, they shall be used.
5. Except in an emergency, employees shall not permit anyone to ride on any part of any vehicle except on the seats or inside the body walls; passengers shall not stand in moving vehicles; employees shall not ride on trailers or jump on or off vehicles in motion.

B. INSPECTION OF EQUIPMENT:

1. Before operating any vehicle, the driver shall determine that the brakes are in safe operating condition. If they are not, they must be corrected before the vehicle is used.
2. Windshield wipers shall be inspected frequently to see that they are operating properly and windows and windshields shall be kept clean to ensure adequate visibility.
3. All lights and reflectors shall be inspected before any vehicle is used. If a light is defective, it shall be corrected before the vehicle is used.
4. Any vehicle defect which has developed during the day that is unsafe shall be reported and corrected before further vehicle operation. All other defects shall be reported at the end of the day.
5. Vehicle first aid kits and fire extinguishers shall be inspected frequently.
6. Employees shall use good housekeeping practices for the vehicles they operate.

C. OPERATION:

1. No driver shall operate the motor of a vehicle in any garage except when driving in and out. Motors shall not be warmed up or tested in a garage unless the exhaust gas is carried directly to outside atmosphere or adequate ventilation is provided.
2. A driver shall clearly signal his/her intention of turning, passing, or stopping.
3. Drivers shall be courteous toward other drivers and pedestrians. They shall operate their vehicles in a safe manner and shall yield the right of way to pedestrians and other vehicles where necessary to avoid accidents.
4. A driver shall maintain a safe stopping distance between his/her vehicle and any vehicle in front of him.
5. Caution shall be exercised when driving through residential and school zones.
6. When entering or leaving any building or street where vision is obstructed, the driver shall make a complete stop and proceed with caution.
7. Before a radio-equipped vehicle is driven under or adjacent to energized equipment, the radio antenna shall be lowered and clearance checked in order to maintain proper clearance between the vehicle and the energized equipment.
8. When refueling a vehicle, all ignition systems shall be turned off and no smoking shall be allowed.
9. When proceeding down a grade, the clutch shall not be disengaged. Trucks shall be in a lower gear on steep grades.

D. PARKING:

1. When a vehicle must be parked on a road, it shall be parked on the right hand side facing the direction of traffic flow, if possible.
2. When parking a vehicle on a road, it shall be parked off the traveled road surface, if possible. If the vehicle is parked closer than ten feet to the traveled road surface, use the proper warning devices.
3. Trucks or trailer stopped on any public road shall be protected by warning lights, reflectors, red flags or cones in accordance with state or local requirements.

4. Do not park vehicles on bridges or over culverts except when necessary for work.
5. When parking on an incline, the driver shall make sure the vehicle is placed in the lowest gear, or "park" position, and the parking brake set. If a curb is present, the front wheels shall be cut into the curb. If a curb is not present, the rear wheels shall be chocked.

E. BACKING:

1. Whenever possible, a vehicle shall be positioned to avoid the need of backing later.
2. Drivers shall use extreme caution when backing a vehicle. If another vehicle is present, he/she shall station him/herself at the rear of the vehicle to assist the driver in backing safely.
3. When backing vehicle which has an obstructed view to the rear:
 - a. Use a reverse signal or back-up alarm audible above the surrounding noise level, or an observer shall signal that it is safe to back.
 - b. Back slowly and watch both sides, but do not depend completely on the rearview mirrors.

F. STOPPING ON HIGHWAY:

1. Employees shall avoid stopping on a highway unless it is absolutely necessary. If a vehicle is stopped on a highway, the driver shall use extreme caution. Warning lights and emergency flashers shall be used. Place flares, reflectors, or cones to give adequate advance warning.
2. If work is in progress, traffic control devices or flagmen shall be used.

G. HAULING POLES OR LADDERS:

1. Load poles, ladders, pipe and other lengthy material parallel with the vehicle length. Such material shall not extend beyond the normal sides of the vehicle.
2. Securely fasten all material to prevent shifting or falling.
3. Material which extends more than four feet beyond the front or back of the vehicle shall have warning devices attached. Use red flags during the day; use red lights at night or during periods of poor visibility.

4. When a vehicle hauling long poles or other long objects must enter a heavy traffic area, escort vehicles displaying proper warning signs shall be used.

A REPETITION OF AN ACCIDENT
IS INEXCUSABLE
IF CORRECTIVE METHODS
HAVE BEEN IDENTIFIED
BUT WERE NOT USED.

**HOW TO FILL OUT
THE EMPLOYEE ACCIDENT
INVESTIGATION REPORT**

GENERAL DIRECTIONS:

1. Complete the report within 24 hours of the accident.
2. Use a ballpoint pen.
3. Write legibly and clearly.
4. Complete ALL items.

DETAILED DIRECTIONS:

1. Employee Name/Facility/Position/Department/Date of Hire/Date of Injury/Time of Injury/Date Reported

These are all self-explanatory. Be specific and accurate in reporting this information.

2. Describe injury and first-aid treatment

These requires the investigator to know the nature of the injury such as laceration, foreign body in the eye, burn, back or shoulder strain, bruise or fracture. The investigator must also know the type of treatment given such as, cleaned wound and bandaged, applied ace bandage, given tetanus shot, reset bone and placed in cast, or required to stay in bed until healed.

3. Describe the accident thoroughly (what happened, i.e. actions, tools, area, conditions)

This requires the investigator to gather all the facts about the accident. From this description the investigator will be able to complete the rest of the form. Without a full description, the investigator and management will not be able to take meaningful corrective action to prevent a similar accident.

The description should take into consideration such information as:

a. The employee's physical/mental state.	f. Did the employee have enough information to do do the job safely?
b. The task being done.	g. Was the employee rushing to get the job done due to pressures?
c. Equipment being used.	h. Were established procedures followed?
d. Safe/unsafe conditions in the work environment.	
e. Availability and use of personal protective equipment (goggles, hardhats, steel-toe shoes, respirators, harnesses, hearing protection, etc.)	

4. Immediate Cause of Injury

This is the investigator's determination of what was THE activity or condition directly responsible for the accident. Activity may mean any action taken or done by the employee, the supervisor, or another employee. The activity may even be a particular procedure, technique or method.

5. Other Contributing Causes

Very few accidents have only one cause. Most accidents are multi-causal. For example, the immediate cause for an employee slipping and falling may be the unsafe condition of an oil spot. Contributing causes could include: (a) Failure of the employee who spilled the oil to clean it up. (b) Failure of the supervisor to ensure that oil spots are cleaned up (i.e. failure to enforce good house-keeping). (c) Lack of equipment to clean up oil spots. (d) The injured employee's running to leave work at the end of the day. (e) Failure to repair the oil leak on the machine from which the oil dripped/spilled.

6. Thoroughly describe all corrective actions implemented as a result of the above accident causes.

Such corrective actions should be a direct result of determining the immediate and contributing causes for the accident.

For example, corrective actions for the above noted example (Item 5) could be:

- a. The supervisor has been told to require all employees to clean up spills, drips and leaks immediately.
- b. The supervisor's employees have begun to clean up spills, drips and leaks immediately and will continue to ensure good housekeeping.
- c. Employees have been given "oil-dry" to put on oil spots to improve the clean-up process.
- d. The injured employee has been told to walk in the facility at all time since running is dangerous.
- e. The oil leak has been repaired, and employees are reporting leaks whenever they are found.

7. Signature of Investigator and Date

These must be included for each accident report.

8. Manager's Review and Approval and Date

These are required. If the manager has a difference of opinion, that opinion should be noted on an attached sheet of paper and a copy stapled to each of the report's copies (White, Yellow, and Pink).

City of Ripon

Accident Investigation Report

Date of Accident _____ Time _____ Department _____

Name of Injured _____
(or individual involved in an accident)

Nature of Injury or Accident _____

Severity of Injury First Aid Medical Treatment Other

Location that accident occurred

Detailed narrative description of the accident. (use addition sheets as required)

Witnesses to the accident:

What if any Personal Protection Equipment (PPE) was required and properly being used at the time of the accident?

What can be done to prevent a recurrence of this type of accident? _____

Supervisor's appraisal and recommendation: _____

Appraisal and recommendation were discussed with employee: Date

Employees comments: _____

Employee Signature: _____ Date _____
Supervisor Signature: _____ Date _____
Department Head Signature _____ Date _____
IIPP Administrator _____ Date _____